

**University of Cape Town**



**School of Management Studies**

**DISSERTATION**

**Training Interviewers to Spot 'Faking' in Employment Interviews:  
Can Frame of Reference Training Enhance Cue Detection, Cue Utilisation, and Overall  
Profile Accuracy for Rating Candidate Deceptive Impression Management?**

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A dissertation submitted in partial fulfilment of the requirements for the award of the Degree  
of Master of Commerce in Organisational Psychology

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**COMPULSORY DECLARATION**

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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### **Abstract**

Deceptive Impression Management (DIM), defined as faking in order to be perceived positively, is frequently used by candidates in employment interviews. DIM is problematic because it is difficult for interviewers to accurately rate, leading to unsound interview evaluations. This invalidates employment interviews because the best candidate is not selected for the job (i.e., deceptive candidates are hired above preferable honest candidates). Deceptive candidates' good interview performance is negatively related to desired organisational outcomes (i.e., once hired, deceptive candidates are more likely to underperform on the job, as well as engage in undesirable workplace behaviours such as lack of effort and/or theft). Drawing on the Realistic Accuracy Model (RAM), it is argued that interviewers do not detect and/or utilise relevant and available DIM cues because they have not been taught to do so. The present study uses a post-test only true experimental design to determine whether students can be trained to accurately rate targets' DIM. A Frame of Reference Training (FORT) intervention was developed, implemented, and evaluated. FORT aimed to teach experimental group participants to detect and utilise relevant and available DIM cues and to make accurate overall DIM profile ratings. Results show that FORT had a positive effect on DIM cue detection, but no effect on either DIM cue utilisation accuracy or overall DIM profile rating accuracy. Findings are attributed to the moderators of the 'good judge', 'good information' as well as the design and implementation of the FORT intervention. Because FORT had a positive effect on DIM cue detection accuracy, it is concluded that raters' behaviour observation ability can be learned and improved with training. To the knowledge of the researcher and research supervisor, this is the first study to: (1) determine the trainability of DIM using FORT; (2) support and disentangle RAM by measuring the effect of FORT on each stage of RAM independently; (3) indirectly examine new dispositional reasoning schemas pertaining to DIM.

*Keywords:* deceptive impression management (DIM), Frame of Reference training (FOR), Realistic Accuracy Model (RAM), accuracy, employment interviews.



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**Training Interviewers to Spot 'Faking' in Employment Interviews:  
Can Frame of Reference Training Enhance Cue Detection, Cue Utilisation, and Overall  
Profile Rating Accuracy for Candidate Deceptive Impression Management?**

Employment interviews are the most commonly used method to screen job candidates during employee selection (Macan, 2009). Screening aims to select the best candidate (i.e., the individual with the highest degree of fit between the job and organisation). Employment interviews are high stakes interpersonal interactions which motivate candidates to portray themselves in a good light. Consequently, a staggering 97.5% of candidates engage in at least one Impression Management (IM) tactic per employment interview to positively influence interviewers' perceptions about their job- and organisation- fit (Bourdage, Roulin, & Levashina, 2017; Bozeman & Kacmar, 1997; Huffcutt & Culberston, 2011; Macan, 2009; Roulin, 2016).

Candidates use IM tactics to either honestly or deceptively promote themselves. When engaging in Honest Impression Management (HIM), candidates truthfully market their genuine qualifications, skills and abilities (Roulin, Bangerter, & Levashina, 2015; Schneider, Powell & Roulin, 2015). Candidates who engage in Deceptive Impression Management (DIM), also known as 'faking', create a dishonest positive image of themselves (Bourdage et al., 2017). DIM is seen when candidates untruthfully distort/tailor their responses to appear more suited to the job and/or organisation than they actually are (Gilmore & Ferris, 1989; Levashina & Campion, 2006, 2007; Swider, Barrick, Harris, & Stoverink, 2011). Both honest and deceptive IM skew interview evaluations, positively influencing interviewers' perceptions of a candidate's suitability (Kacmar, Delery, & Ferris, 1992; Kristof-Brown, Barrick, & Franke, 2002; Levashina & Campion, 2007; Roulin et al., 2015; Stevens & Kristof, 1995; Van Iddekinge, Raymark, & Roth, 2005). From an organisational perspective, DIM is more concerning than HIM, with HIM being widely condoned (Jansen, König, Stadelmann, & Kleinmann, 2012).

Although almost all applicants seem to engage in DIM, DIM is problematic. DIM is difficult and unlikely to be rated accurately, leading to invalid interview evaluations and poor hiring decisions which are costly to organisations. In a recent study by Reinhard, Scharmach, and Muller (2013), it was found that interviewers correctly distinguish between the truth and lies 52.4% of the time. Findings reflect current IM literature which states that the probability of accurately detecting between DIM and HIM is at chance level (i.e., a 50% accuracy rate).

For example, a meta-analysis across 206 studies found that raters make accurate lie-truth judgements only 54% of the time on average (Bond & DePaulo, 2006).

Undetected DIM compromises the validity of employment interviews because hiring decisions are poorly based on 'fake' interview performance evaluations (Roulin et al., 2015). Poor hiring decisions have significant financial and non-monetary costs for organisations because the best candidate is not selected for the job (Bourdage et al., 2017; Roulin, 2016; Schneider et al., 2015). Once hired, deceptive candidates are more likely to display undesirable behaviours at work, such as: poor performance, lack of effort, absenteeism and theft (Roulin, 2016).

To increase the validity of employment interviews, it is suggested that interviewers should be trained to accurately rate candidates' DIM. Once DIM is detected, interviewers should use this information to lower the candidate's interview evaluation score and/or remove them from the selection pool (Rosenfeld, 1997).

To address the need for training, this dissertation designs, implements, and evaluates a Frame of Reference Training (FORT) intervention to train raters to accurately rate DIM. FORT is based on the principles of: practice, exposure and feedback. Training aims to replace trainee raters' maladaptive cognitive frameworks with adaptive schemas for accurate information processing. FORT has been empirically proven to increase rating accuracy in other person perception domains, such as personality (e.g., Roch & Woehr, 2012).

A further novel feature of the present research is that the stages of Funder's (1995) Realistic Accuracy Model (RAM) are disentangled and measured independently to understand the underlying mechanisms behind rating (in)accuracy. RAM explains that, in order for accurate ratings to occur, the following four multiplicative stages must be correctly completed chronologically: cue relevance, availability, detection, and utilisation. In light of RAM, it is argued that interviewers inaccurately rate candidates' DIM because they do not know which relevant and available DIM cues to detect and/or how to utilise these cues during employment interviews. Rater training is needed to teach interviewers which cues are indicative of DIM and how to use these cues to make accurate ratings (Van Iddekinge et al., 2005). In support of RAM, this study develops a series of video-recorded mock employment interviews which make relevant DIM cues available to participants. Video-recorded mock employment interviews are used as stimuli/tools during both training and assessment.

To investigate the above, this dissertation sets out to answer the following question:

*'What is the effect of a Frame of Reference Training (FORT) intervention on raters' DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy?'*

The present study has two main purposes: Firstly, it aims to determine whether students can be trained to accurately rate targets' DIM in employment interviews. This aim has implications for theory: this is the first study to use FORT to train raters to accurately rate DIM. Secondly, this study aims to gain a deeper understanding into the processes behind (in)accurate ratings of DIM. The second aim is achieved by disentangling the multiplicative stages of RAM and measuring the effect of FORT on each stage independently. This is the first known study to differentiate the stages of RAM in this manner, and therefore advances current academic knowledge. Measuring the disentangled stages of RAM speaks to De Kock, Lievens, and Born's (2018) recommendation for future research which suggests that behavioural accuracy measures should be measured in component parts (i.e., measuring each stage of the accurate rating process independently). The present study further adds to theory by indirectly examining new dispositional reasoning schemas (i.e., schemas pertaining to DIM) (De Kock, Lievens, & Born, 2017). From a practical perspective, findings are relevant to organisations and practitioners who wish to train interviewers. The assessment package developed for this study can also be used as a practical tool by: (a) practitioners to screen potential interviewers, and (b) future researchers to replicate and/or advance this study.

## Chapter 1: Deceptive Impression Management

### 1.1.Types of (Deceptive) Impression Management Tactics

There are three types of IM tactics: *Image creation*: candidates emphasise their qualifications and/or abilities to be seen as capable; *Ingratiation*: candidates flatter the interviewer/organisation to be seen as likeable, and *Image protection*: candidates use excuses to justify their involvement in a negative event or error (Bourdage et al., 2017; Roulin, 2016).

IM is divided into HIM and DIM. Each IM tactic is used either honestly or deceptively. The following describes how each IM tactic is used deceptively when candidates engage in DIM: (a) *Deceptive image creation*: this tactic takes the form of either 'slight image creation' or 'extensive image creation'. Slight image creation is seen when applicants embellish their accomplishments, skills and abilities. Extensive image creation occurs when candidates proactively lie to invent their qualifications, past experiences, etc. (Bourdage et al., 2017; Roulin et al., 2015), (b) *Deceptive ingratiation*: applicants use this tactic when expressing dishonest beliefs about the interviewer and/or organisation to make themselves seem likable (e.g., lying about having an interest in common with the interviewer). Some DIM tactics are considered 'faking' and are not necessarily 'lying' (i.e., not telling the full truth and/or obscuring the truth without proactively lying). It is argued that slight image creation is a type of 'white lie'. Extensive image creation and deceptive ingratiation are argued to be semantically close to lying. (c) *Deceptive image protection*: applicants use this tactic when omitting/ hiding negative information about themselves to protect their own image. Deceptive image protection is a form of lying by omission (Roulin et al., 2015; Schneider et al., 2015).

### 1.2.Deceptive Impression Management Antecedents

HIM and DIM have different antecedents, making candidates more/less likely to engage in either honest or deceptive IM. IM antecedents are broadly grouped as either: (a) candidate characteristics, (b) situational characteristics, or (c) interviewer characteristics. The role of the candidate's characteristics has been widely investigated. Past studies have focused on individual differences in personality traits (e.g., Honesty-Humility and Extraversion), intelligence and social skill (Buehl & Melchers, 2017; Law, Bourdage, & O'Neil, 2016; Roulin & Bourdage, 2017). For example, it has been shown that the likelihood of DIM

engagement increases when interviewees (i.e., targets) are low on the personality trait of Honesty-Humility (Bourdage et al., 2017).

Less research has been done in the areas of situational antecedents, with interview question type being the main situational antecedent of interest. There are two types of interview questions: past-behaviour and situational (Campion, Palmer, & Campion, 1997). In past behaviour questions, interviewees describe how they acted in past job-related situations (Janz, 1982; Motowidlo & Burnett, 1995). In contrast, situational questions ask interviewees to describe how they would behave in hypothetical situations (Latham, Saari, Pursell, & Campion, 1980; Latham & Sue-Chan, 1999). The type of interview question asked generally predicts the type of IM tactic used. When asked past-behaviour questions, candidates are more likely to use self-focused IM. Other-focused IM is a more common response to situational questions (Levashina, Hartwell, Morgeson, & Campion, 2014; Roulin et al., 2015).

### **1.3. Deceptive Impression Management Cues**

Past research on deceptive cues has been based on binary outcomes (i.e., truth vs. lie). For example, a meta-analysis by DePaulo et al. (2003) combined a total of 116 studies to determine which cues can differentiate truth-tellers from liars in everyday interpersonal interactions. Deceptive cues were identified at the macro-level (i.e., broad categories of behaviours) and micro-level (i.e., discrete behaviours). Of the 158 behavioural cues investigated, approximately 25% were identified as valid behavioural indicators of deception, with the majority having a small to moderate effect size. It was found that, when compared to truth-tellers, liars were less verbally and vocally involved. This means that liars talked less, gave less detailed answers, repeated themselves more frequently and spoke in a higher pitch. Deceptive individuals raised their chin more frequently and had more dilated pupils (DePaulo et al., 2003). On a micro-level, the following deceptive cues were found: increased nervousness and anxiousness, more insecurity and uncertainty, more indifference, less cooperation and less logical responses. In contrast to existing beliefs at the time, no difference between honest and deceptive individuals' eye contact, gaze aversion, hand and/or body movements, posture changes, blinks and smiling were found (DePaulo et al., 2003; Schneider et al., 2015).

The above findings are important when understanding deception in everyday interpersonal interactions, not DIM. DIM is more complex because it takes many different

forms (i.e., there are many types of DIM tactics), with each DIM tactic being manifested in different cues. That is, during employment interviews, candidates emit cues of deception in the form of verbal and non-verbal behaviours. It was unclear whether the valid deceptive cues identified by DePaulo et al. (2003) apply to DIM in employment interviews. In response, Schneider et al. (2015) set out to determine the indicators (i.e., cues) of deception in this context. Schneider et al.'s (2015) findings are central to this study. Please see tabularised DIM cues per type of DIM tactic in Appendix A.

**1.3.1. Micro-level Behavioural Cues.** Micro-level behavioural cues are divided into: verbal cues and facial cues. Overall, deceptive candidates have unstrained verbal behaviours and restrained facial behaviours (Schneider et al., 2015).

**Verbal cues.** Verbal cues are seen in deceptive candidates' verbal behavioural cues and narrative/discourse cues.

*Verbal behavioural cues.* Past research claims that deceptive individuals provide less detailed responses, repeat themselves more frequently, take long pauses, and consistently talk in a higher pitch than truth-tellers (e.g., Sporer & Swandt, 2007). Schneider et al.'s (2015) findings on verbal cues contradict this claim. It was found that deceptive candidates speak more quickly with more errors, and they are less likely to take pauses (i.e., there are less silences in their speech). This contradiction is attributed to the unique cognitive demands found in employment interviews. Deceptive candidates have a higher cognitive load than honest candidates. They spend a lot of cognitive energy and resources creating and maintaining 'faking' during interviews which are already high-stakes interpersonal interactions. It is possible that deceptive candidates are unable to spend more cognitive resources restraining their verbal outputs, making their speech subject to several disturbances. Importantly, unrestrained verbal behaviour is positively related to interview performance (Schneider et al., 2015).

*Narrative/discourse cues.* Interviewers who focus on discourse cues are better at detecting DIM than those who focus solely on verbal behavioural cues. There are two types of narrative/discourse tactics, namely: assertive and defensive tactics. Assertive tactics include 'deceptive image creation' and 'deceptive ingratiation'. Candidates use assertive verbal tactics to proactively construct the image of being a good candidate for the job. In contrast, defensive verbal tactics refer to 'deceptive image protection'. Applicants use this tactic to repair negative perceptions and/or defend the image of being a good candidate for the job (Roulin et al., 2015). All deceptive narrative/discourse cues used in this study were

based on items from Levashina and Campion's (2007) Interview Faking Behaviour Scale, as seen in Appendix B.

**Facial cues.** Deceptive interviewees have restrained facial behaviours (i.e., less smiling) and unrestrained verbal behaviours. The idea of restrained facial behaviours is in keeping with past literature on controlled movements and behaviour, discussed under 'macro-level behavioural cues' below (Schneider et al., 2015).

**1.3.2. Macro-level Behavioural Cues.** In keeping with restrained facial cues, deceptive candidates exhibit less overt (macro) behavioural cues than truth-tellers. For example: liars engage in less nodding, as well as less hand and leg movements than honest individuals (Mann, Vrij, & Bull, 2004; Schneider et al., 2015; Sporer & Schwandt, 2007). This contradicts laymen's beliefs: folk law claims that liars make more exaggerated bodily movements. It is possible that liars perceive macro-cues (e.g. fidgeting) as a cue for deception, and overcompensate by exerting extreme control over these observable behaviours. As a result of their over compensation, deceptive candidates might come across as if they are 'holding back' during employment interviews. Furthermore, deceptive candidates are perceived as less anxious than honest applicants (Schneider et al., 2015). In past deception literature, signs of anxiousness are associated with lying, especially the fear of being caught out (Ekman, 1992). Anxious applicants are less likely to engage in DIM because all of their cognitive energy and resources are expended on trying to appear composed. Signs of anxiousness are negatively related to interview performance (i.e., non-anxious deceptive applicants performed better than honest anxious applicants) (Feiler & Powell, 2015; McCarthy & Goffin, 2004). Certain types of DIM tactics have specific macro-cues. The key macro-cue for slight self-promotion is 'lack of professionalism'. 'Attentiveness' is the dominant macro-cue for deceptive ingratiation. Deceptively ingratiating applicants appear attentive in attempt to be liked by the interviewer (Schneider et al., 2015).



## Chapter 2: Rating Accuracy

### 2.1. Measuring Deceptive Impression Management

There is no one 'best' way to assess rating accuracy (Sulsky & Balzer, 1988). Different researchers employ various methods to measure IM in employment interviews. Each of the measurement methods discussed are associated with a set of strengths and weaknesses.

**2.1.1. Self-ratings.** At present, the most common and accurate way to detect IM in employment interviews is by administering self-report measures to real-life candidates (Roulin et al., 2015). For example, Kristof-Brown et al. (2002), Levashina and Campion (2007), Swider et al. (2011), as well as Tsai, Chen, and Chiu (2005) administered self-report questionnaires to candidates immediately after their job interviews, asking candidates to rate their IM use. Similarly, König, Hafsteinsson, Jansen, and Stadelmann (2011) asked candidates to recall and report on their IM usage in their most recent job interview. A judge is often asked to rate the candidate's IM usage independently. When there is a high degree of correlation between the target's self-rating and the judge's rating, the accurate result is referred to as 'self-other agreement'. Self-report questionnaires are potentially highly accurate because only candidates are aware of their own IM usage. However, self-ratings are vulnerable to social desirability bias/ self-enhancement (Powell, 2007; Vogt & Colvin, 2003). Real-life candidates are unlikely to truthfully report their DIM usage out of fear that their interview performance will be negatively impacted. It is argued that self-reports are effective in clinical trials, but impractical in the real-life settings (Powell, 2007).

**2.1.2. Behavioural data.** Behavioural data is obtained by training coders to code IM based on video/audio recordings of actual interviews and/or interview transcripts (e.g., Ellis, West, Ryan, & DeShon, 2002; McFarland, Yun, Harold, Viera, & Moore, 2005; Stevens & Kristof, 1995; Van Iddekinge, McFarland, & Raymark, 2007). Accuracy scores are determined using a composite of ratings, referred to as 'realistic accuracy'. This term suggests that the composite criterion is more accurate than a criterion composed of only self-report and/or other-judgement ratings (Funder, 1995; Letzring, Wells, & Funder, 2006; Letzring & Funder, 2016). Behavioural data is used to determine the accuracy of targets' self-reports and/or compare the accuracy of self-reports vs. other-judgements (Funder, 2012). Trained coders are argued to be more advantageous than self-report ratings because there is less likelihood that they will respond in a socially desirable manner. In a counterargument, it

is argued that coders are less likely to accurately detect IM because they are unaware of candidates' actual IM usage (Roulin et al., 2015).

**2.1.3. Consensus or peer agreement.** Consensus or peer agreement criteria are established by correlating two or more raters' ratings on the same target. Unfortunately, consensus does not necessarily correspond with accuracy. It is possible for judges to inaccurately agree on the same rating (Letzring & Funder, 2016).

## **2.2. Conceptualising and Operationalising Rating Accuracy**

There are many different theoretical terms to denote accuracy, such as: 'rating accuracy' (Borman, 1977) and 'realistic accuracy' (Funder, 1995). Across all conceptualisations, being accurate is defined as being 'right' (i.e., correct), rather than 'wrong' (Pieterse, 2016). Accuracy can be divided into two types: 'diagnostic accuracy' and 'predictive accuracy'. Diagnostic accuracy, or 'inferential accuracy', is the focus of the present study. Diagnostic accuracy is seen when raters correctly diagnose/infer the degree to which a target has a characteristic that can be classified in terms of 'depth'. Depth refers to whether the behaviour has occurred and/or what caused the behaviour. Predictive accuracy occurs when raters correctly predict targets' future behaviours (e.g., accurately predicting that deceptive candidates will perform poorly on the job) (Jackson, 1972; Pieterse, 2016). From an operational (i.e., measurement) perspective, 'accuracy' is determined by the extent to which a rater's rating matches/corresponds to a predetermined rating standard (i.e., a true score) (Woehr & Huffcutt, 1994). The most common operationalisations of accuracy in person perception literature are: Cronbach's (1955) four accuracy indices (i.e., Elevation, Differential Elevation, Stereotype Accuracy, Differential Accuracy), Borman's (1977) differential accuracy, and distance accuracy (Murphy & Cleveland, 1995). This study focuses on Cronbach's (1955) differential accuracy and Borman's (1977) differential accuracy, while also including Lord's (1985) operational definition of behavioural accuracy, based on Signal Detection Theory<sup>1</sup>.

**2.2.1. Cronbach's Accuracy Indices.** Cronbach's (1955) accuracy indicates the different strategies used to identify the difference/deviation from a rater's ratings and the 'true scores'. When interpreting Cronbach's (1955) accuracy indices, lower scores indicate

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<sup>1</sup> Signal Detection Theory refers to a raters' ability to accurately detect a signal (i.e., the relevant information/cue) above noise (i.e., the background/irrelevant information detracting from the signal). Signal Detection Theory can be applied in experimental research to measure rating accuracy by determining raters' 'hit rates' (i.e., "true positives") and "false-alarm rates" (i.e., "false positives") when rating conceptually similar items.

higher accuracy (Powell, 2007). The four indices are defined: Elevation (EL) denotes raters' overall strictness/leniency (i.e., inaccurate raters are too strict or too lenient with scores that are either too low or too high). Differential Elevation (DE) indicates how accurately raters differentiate among targets, averaging traits. Accurate raters correctly rank order targets in terms of their aggregated trait scores. Stereotype Accuracy (SA) determines how accurately raters discriminate among a group of targets. Differential Accuracy (DA) reflects raters' sensitivity to differences in target-trait patterns. Accurate raters are sensitive and correctly rate targets' overall trait profiles (Powell, 2007). Differential accuracy is argued to be the most meaningful and appropriate operationalisation of accuracy in person perception studies. Raters who score well on differential accuracy are able to accurately rate a target's trait profile (Powell, 2007).

**2.2.2. Borman's Differential Accuracy.** Borman's (1977) differential accuracy shows raters' ability to accurately rank order targets' standings with regard to a specific trait. Accuracy scores are based on correlations, with higher scores reflecting higher accuracy. Sulsky and Balzer (1988) argue that correlational measures are not true measures of accuracy because they do not provide information about the difference (i.e., distance) between the rater's score and the true score. It is possible for raters' scores to correlate highly, while differing from the true score. For example: if a rater consistently scores a target 2 points higher than an expert rater, the two raters' ratings will be perfectly positively correlated, indicating accuracy. However, the rater's scores do not perfectly mimic the expert rater's scores (Roch, Woehr, Mishra, & Kieszczynska, 2012). In response to this concern, Sulsky and Balzer (1988) favour other accuracy measures (e.g., 'distance accuracy' based on the distance between a rater's scores and the true scores).

**2.2.3. Lord's Operationalisation of Accuracy.** Behavioural accuracy is a function of selecting the trait-relevant cues (i.e., cues that are manifestations of the trait) and suppressing cues which are not trait-relevant (Banks & Murphy, 1985). Behavioural accuracy is measured in two steps: First, the number of (a) hit rates/ true positives (i.e., the number of items correctly identified), and (b) false-alarm rates/ false positives (i.e., the number of items incorrectly identified) are determined. Second, the scores in step one are turned into measures of either 'memory strength' or 'detection efficiency' (Lord, 1985). Behavioural rating accuracy can be negatively impacted by raters' behaviour, target classification, and raters' differences in decision criteria. Assuming that raters have equivalent decision criteria, a rater's hit rate and false-alarm-rate are determined by the strength of the signal (i.e., available behavioural information) and noise (i.e., third variables that interfere with and/or prevent the

signal from being detected). Behavioural rating accuracy can be increased by strengthening signal, decreasing noise, and/or addressing raters' decision criteria. Inaccurate ratings occur because raters synthesize target-related information around oversimplified pre-existing cognitive categories (i.e., schemas). Synthesis is likely to arise in systematic, rather than random, error. Systematic error is concerning because the majority of psychological tests interpret this type of error as true score variance, leading to inflated/deflated accuracy scores (Lord, 1985).

### **2.3. Lens Theory**

Brunswik's (1955, 1956) Lens Theory states that: when making judgments about phenomena that cannot be directly observed (e.g., personality), judges focus on available cues. Multiple cues are given off by an 'object' (i.e., the target), with differing degrees of relevance. The degree to which a cue is relevant to the object is referred to as either 'cue validity' or 'ecological validity' (Letzring & Funder, 2016). Accurate judgments are made when the actual properties of the cue correlate with the judge's perception of the cue's properties. For example, with regard to accurate personality judgement, arriving at an appointment on time is a relevant/valid cue for conscientiousness, but not for openness. Likewise, talkativeness is a cue for extraversion, not introversion. If the cue is not available, or a judge inaccurately utilises the cue, an inaccurate judgment will be made. For example, a judge hosting a telephonic interview cannot detect that the candidate is smiling (i.e., a cue for friendliness) because the candidate is not seen. Because the cue (i.e., smiling) is not available for detection, the judge could make an inaccurate judgment about the applicant's (un)friendly personality (Powell, 2007). Lens Theory has been used extensively to study cue relevance, cue utilisation, and accuracy for several characteristics, such as: IQ (Hammond, 1955; Hammond, Hursch, & Todd, 1964), the Big Five personality traits and intelligence (Borkenau & Liebler, 1992, 1995), and deception (Hartwig & Bond, 2014).

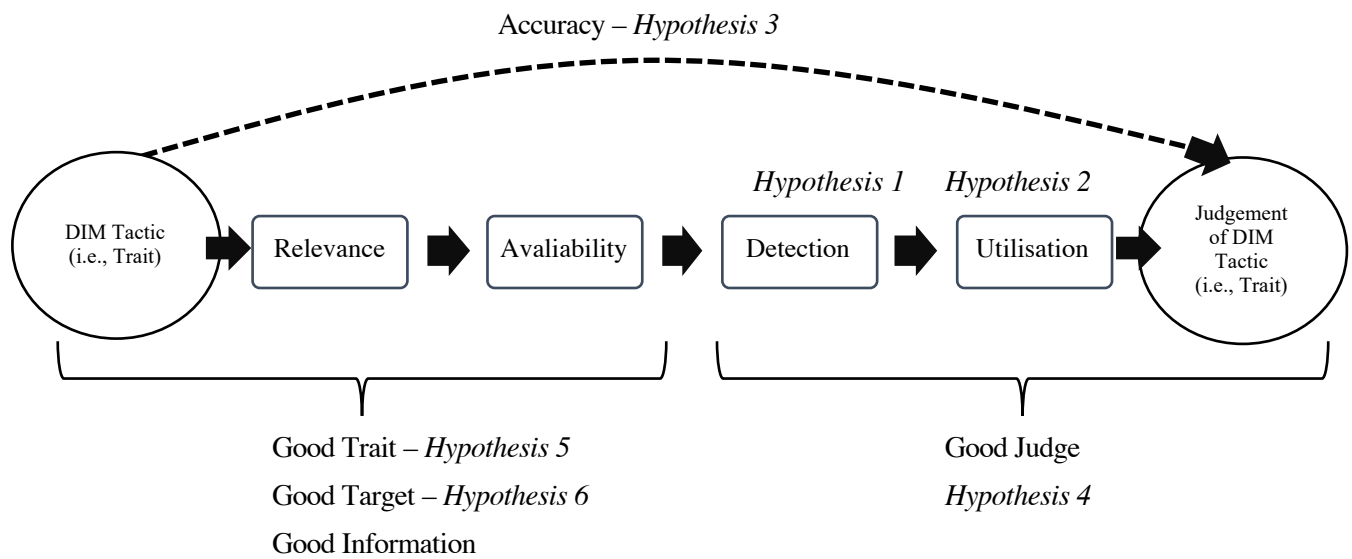
### **2.4. Realistic Accuracy Model (RAM)**

Inspired by Brunswik's (1955, 1956) Lens Theory, Funder (1995) developed the Realistic Accuracy Model (RAM) to understand the underlying processes, or variables, which determine how and why judges are able to accurately rate others' personalities (Powell & Bourdage, 2016; Powell & Goffin, 2009). Many of the illustrative examples given in this literature review pertain to accurate personality judgement, not DIM.

According to RAM, accurate judgment occurs during the following four stages: (a) relevance, (b) availability, (c) detection, and (d) utilisation. RAM expands on Lens Theory by recognizing that, in addition to cues being relevant and available to the judge, the judge must also detect and utilise these cues correctly to make accurate judgments. The first two stages of RAM (i.e. relevance and availability) occur in the social environment and involve the target of judgment (Powell, 2007). The final two stages (i.e. detection and utilisation) occur in the intrapersonal environment and are therefore dependent on the judge (Powell & Bourdage, 2016).

The four stages in RAM are multiplicative, not additive (Funder, 1995, 2012; Human & Biesanz, 2013). Multiplicativity means that each stage is dependent on the previous stage. Failure to correctly execute one stage has a knock-on-effect, resulting in an inaccurate judgment. Hence, a 'zero' score in one stage results in a 'zero' score for all future stages in the model (Powell & Bourdage, 2016). For example, if a relevant cue is not made available to the rater, and/or the rater does not correctly detect and utilise the cue, accurate rating will not be possible (Funder, 2012).

Accurate ratings are moderated by four variables: the good judge, trait, target and information. Accurate judgement is most likely when a 'good target' or 'good trait' is being judged based on 'good information' used by a 'good judge' (Funder, 1995, 2012). The four multiplicative stages of RAM and moderating variables are reviewed below. Research hypotheses are provided when appropriate. Please see the conceptual diagram for this study in Figure 1.



*Figure 1.* The Realistic Accuracy Model applied as a conceptual diagram for this study and research hypotheses: processes and moderators<sup>2</sup> (De Kock, Lievens, & Born, 2015; Funder, 1995).

#### 2.4.1. The four multiplicative stages of Funder’s RAM.

**Relevance.** The target must produce some information (i.e., a cue) that is relevant to the trait being judged (Powell & Goffin, 2009). For example: with regard to accurate personality ratings, when a candidate arrives early for the employment interview, they provide relevant behavioural information about their conscientious personality (Funder, 2012; Powell, 2007; Powell & Bourdage, 2016; Powell & Goffin, 2009).

**Availability.** The information provided by the target must be made available for the rater to observe during this stage (Powell & Bourdage, 2016; Powell & Goffin, 2009). This stage cannot be achieved if the relevant cue is not presented in the presence of the rater. For example, in the context of personality rating, trust is a cue indicating agreeableness. Therefore, if a candidate with an agreeable personality does not show high level of trust in others during the interview, the interviewer will not be able to accurately rate the candidate’s personality (Funder, 2012; Powell, 2007).

<sup>2</sup> The conceptual diagram suggests that it would be more appropriate to label the good judge, trait, target, and information as mediators of rating accuracy, rather than moderators. However, the terms “moderators” or “moderating variables” are used in keeping with the standard research practices employed when investigating RAM.

**Detection.** The judge must be able to detect and remember the relevant and available cues (Powell & Bourdage, 2016). Cue detection requires the judge to be attentive to avoid overlooking cues (Powell, 2007; Powell & Goffin, 2009). Cue detection will not occur if the rater is unperceptive, perceptually impaired, or distracted (Funder, 2012).

*Hypothesis 1.* The experimental group detects DIM cues more accurately than the control group.

*Hypothesis 1a.* The experimental group detects more DIM cues than the control group in total.

*Hypothesis 1b.* The experimental group has more accurate responses (i.e., hit-rates/true positives) when detecting DIM cues than the control group.

*Hypothesis 1c.* The experimental group has less false-alarm responses (i.e., false positives) than the control group when detecting DIM cues.

*Hypothesis 1d.* When detecting DIM cues, the experimental group miss less DIM cues (i.e., false negatives) than the control group.

*Hypothesis 1e.* When detecting DIM cues, the experimental group scores better on 'negative marking'<sup>3</sup> than the control group.

**Utilisation.** The rater must correctly interpret and use the relevant and available cues detected in the previous stage (Powell & Bourdage, 2016). For example, having detected a target's genuinely friendly smile, the rater must correctly utilise this cue to accurately rate the target as 'friendly'. If the rater incorrectly utilises this cue, the target's smile might be inaccurately judged as indicative of their insincere, sarcastic, or manipulative personality (Funder, 2012).

*Hypothesis 2.* Having received FORT, the experimental group utilises DIM cues more accurately than the control group.

*Hypothesis 2a.* The experimental group is more accurate at utilising DIM cues pertaining to deceptive image creation than the control group.

*Hypothesis 2b.* The experimental group is more accurate at utilising DIM cues pertaining to deceptive ingratiation than the control group.

*Hypothesis 2c.* The experimental group is more accurate at utilising DIM cues pertaining to deceptive image protection than the control group.

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<sup>3</sup> A marking system whereby no marks are awarded for the correct answer, and marks are deducted from the total when an incorrect answer is given.

*Hypothesis 3.* The experimental group is more accurate at rating targets' overall DIM profile than the control group.

**2.4.2. The four moderating variables of RAM.** Prior to Funder (1995), other researchers investigated similar moderators of rating accuracy. The 'good judge' as a moderator of accurate judgement was examined by Adams (1927), Vernon (1933) and Allport (1937). Allport (1937) and Estes (1938) proposed three moderators that carried the essence of the good judge, the good target, and the good trait. The moderating effect of 'good information' was identified by Allport (1937). Although these moderators had been identified previously, Funder (1995) enhanced past academic knowledge by linking each moderator to RAM's stages (Letzring & Funder, 2016).

*The 'good judge'.* Judges with positive individual characteristics (e.g., higher cognitive ability, social sensitivity, and personality traits such as conscientiousness and emotionality) are more likely to be more accurate raters (Adams, 1927; Allport, 1937; Colman, Letzring, & Biesanz, 2016; Funder, 1995; Kolar, 1996; Lee & Ashton, 2006; Powell, 2007; Taft, 1955; Vernon, 1933; Vogt & Colvin, 2003). In applied organisational settings, individuals who possess the characteristics of the 'good judge' should be selected as interviewers (Powell & Bourdage, 2016). The majority of the current literature on the 'good judge' focuses on RAM's stages of detection and utilisation. Judges' individual characteristics and behaviours also determine: (a) the likelihood that candidates will engage in DIM, and (b) the amount of relevant information made available by targets (Letzring, 2008). Therefore, in addition to the stages cue detection and utilisation, the 'good judge' also moderates RAM's stages of cue relevance and availability (Letzring & Funder, 2016).

The systematic review by De Kock et al. (2018) found that individuals' cognitive factors are the most strongly and consistently related to accurate interpersonal judgements. Of specific interest to this study is an individual difference ability called 'dispositional reasoning ability', defined as: "the complex knowledge of traits, behaviours, and situations' potential to elicit traits into manifest behaviours" (De Kock et al., 2015, p. 200). The three dispositional reasoning components (i.e., trait induction, extrapolation, and contextualisation) are declarative knowledge structures (i.e., cognitive structures that help raters' information processing) (Christiansen, Wolcott-Burnam, Janovics, Burns, & Quirk, 2005). When investigating dispositional reasoning, De Kock et al. (2015) found that managers who were good at trait extrapolation and trait contextualisation are more accurate judges. This means that, when making accurate interpersonal judgements in the interview context, knowing



which traits are manifested by different behavioural cues (i.e., trait induction) is less important than knowing the covariation between traits (trait extrapolation) and/or how different traits are expressed in different situations (trait contextualisation). Dispositional reasoning ability components generally correspond to a type of intelligence (De Kock et al., 2015).

The recognition of raters' intelligence is in keeping with Interpersonal Deception Theory (IDT) and early researchers who found that accurate personality judgement was more likely among intelligent raters (e.g., Allik, 2017; Lippa & Dietz, 2000; Taft, 1955). IDT claims that the likelihood of accurately detecting deception depends on the receivers' cognitive and decoding abilities as well as their social sensitivity (Roulin, 2016). According to IDT, when receivers (i.e., raters) receive messages from senders (i.e., targets), receivers first determine whether the message is truthful or deceptive. The 'truthfulness' of a message is determined by the receiver's knowledge about the sender, the information transmitted in the message, and the receiver's level of suspicion. IDT predicts that detecting honest messages is less cognitively complex and demanding than detecting deceptive messages (Buller & Burgoon, 1996). Receivers with higher cognitive abilities employ systematic information processing strategies to focus on the correct deceptive cues, resulting in accurate ratings of the senders' truthfulness and/or deceptiveness (Roulin, 2016). In contrast, receivers with lower cognitive abilities tend to focus on cues that are easier to detect, but that are less accurate indicators of deception (e.g., focusing on behavioural cues only). Furthermore, such raters employ counterproductive heuristic-based information processing strategies (e.g., less intelligent raters fall into the 'truth bias' as a way of decreasing their cognitive load. The truth bias explains that receivers expect senders to be trustworthy and therefore rate them as such, irrespective of their trustworthiness (Millar & Millar, 1997). Accurate deception detection is easier for individuals with high social sensitivity. In this context, social sensitivity is argued to be a type intelligence called 'generalised trust' (Yamagishi, 2001). Highly socially sensitive individuals are able to be doubtful about senders' truthfulness (i.e., they do not fall into the truth bias), yet they are not overly suspicious. Organisations should hire interviewers that are 'high cognitive ability trusters' as they are the most accurate raters of DIM in employment interviews (Roulin, 2016).

*Hypothesis 4a.* There is a positive relationship between DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy.

*Hypothesis 4b.* There is a positive relationship between DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy in the control group.

*Hypothesis 4c.* There is a positive relationship between DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy in the experimental group.

***The 'good trait'.*** Good traits have two characteristics: 'visibility' (i.e., observability) and 'evaluateness' (i.e., degree of social desirability).

Visibility, or 'observability', refers to the number of external/overt cues that the target makes available and are relevant to the trait being judged. Traits manifested in external cues are likely to be accurately judged, while internally manifested traits (e.g., thoughts and feelings) are less likely to be judged accurately (Funder & Debroth, 1987; John & Robins, 1993; Paunonen & Kam, 2014; Watson, Hubbard, & Wiese, 2000). For example, behavioural manifestations of extraversion (e.g., smiling and talkativeness) are directly observable, making this trait easy to detect and rate accurately. Manifestations of neuroticism (i.e., anxiety and depressive thoughts) are less observable, decreasing the likelihood of rating accuracy (Allik, 2017; Funder & Debroth, 1987). The positive relationship between trait visibility and rating accuracy is only true when raters are moderately acquainted with targets (Paunonen, 1989).

Evaluateness, or 'social desirability', determines whether a trait is socially desirable, socially undesirable, or neutral. The evaluateness of a trait determines the likelihood that it will be made available for judgment. High levels of evaluateness are seen in socially desirable and undesirable traits. Low levels of evaluateness are found in neutral traits (Letzring & Funder, 2016). There is a curvilinear relationship between social desirability and accuracy: when levels of social desirability are moderate (i.e., low levels of evaluateness), judgement is more accurate than when a trait is socially undesirable (i.e., high levels of evaluateness) (John & Robins, 1993).

It is necessary to highlight the importance of situational factors in accurate trait judgement. The availability of relevant cues does not only depend on the visibility and/or evaluateness of the trait, rather, the situation/ context also plays a role (Letzring & Funder, 2016). In situations that are relevant to undesirable traits (e.g., socially stressful situations which evoke feelings of neuroticism), socially undesirable traits are more likely to be made available and judged accurately.

*Hypothesis 5a.* At the trait level, the experimental group is more accurate at rating the degree to which targets engage in deceptive image creation than the control group.

*Hypothesis 5b.* At the trait level, the experimental group is more accurate at rating the degree to which targets engage in deceptive ingratiation than the control group.

*Hypothesis 5c.* At the trait level, the experimental group is more accurate at rating the degree to which targets engage in deceptive image protection than the control group.

**The 'good target'.** Good targets have 'judgeability', making them consistently easier to judge accurately (Biesanz et al., 2011). Easily 'judgeable' targets are transparent about their thoughts and feelings. Their behaviours are also consistent, reflecting their 'normal' behaviour (Funder, 2012). In contrast, the 'bad target' is described as "contradictory and confusing" (Cline, Atzet, & Holmes, 1972, p. 386). In keeping with the 'good judge', good targets have positive individual characteristics which assist rating accuracy, such as: extraversion, agreeableness, conscientiousness, emotional stability. Good targets behave in a positive manner, showing: warmth, compassion, and social engagement (Colvin, 1993).

*Hypothesis 6a.* The experimental group rates Target 1<sup>4</sup> more accurately than the control group.

*Hypothesis 6b.* The experimental group rates Target 2 more accurately than the control group.

*Hypothesis 6c.* The experimental group rates Target 3 more accurately than the control group.

**'Good information'.** The 'goodness' of information is determined by its quantity and quality.

Information quantity is defined by the number of relevant cues available to the rater. According to the 'acquaintanceship effect', raters who have known targets for a long period are more accurate because they have been exposed to a greater number of cues over time (Blackman & Funder, 1998; Connelly & Ones, 2010; Funder & Colvin, 1988; Letzring et al., 2006; Paunonen, 1989; Watson et al., 2000). Regardless, accurate ratings are also made when the rater has little/short exposure to the target. This is seen in 'zero acquaintance' or 'thin slice' research. Zero acquaintanceship sees more accurate ratings for good traits (e.g., extraversion, positive-affect, self-esteem, and intelligence) than bad traits (e.g., neuroticism and dominance) (Borkenau & Liebler, 1992; Hall, Andrzejewski, Murphy, Mast, & Feinstein, 2008; Letzring & Funder, 2016; Naumann, Vazire, Rentfrow, & Gosling, 2009).

Information quality speaks directly to the first stage of RAM (i.e., relevance). Information quality is influenced by the manner in which the interpersonal interaction is conducted and the type of question asked. Higher quality information is gathered during

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<sup>4</sup> Targets 1, 2, and 3 refer to the interviewees (i.e., actors) in the first, second, and third video-recorded mock employment interviews contained in the cue utilization task.

unstructured, as opposed to structured, interviews. In structured interviews, targets are tightly controlled and the information they make available might lack depth and breadth (Funder, 2012). Interviewees provide greater quality information in response to past-behavioural questions than situational questions (Roulin et al., 2015). In past behaviour questions, candidates must describe the situation, the task at hand, their past behaviour, and the results of their behaviour (Oliver, Bakker, Demerouti, & De Jong, 2005; Tross & Maurer, 2008). In situational questions, the need to describe the situation/task at hand is removed because the interviewer sets the scene. However, situational question responses cannot be verified, offering more deceptive opportunities than past-behaviour questions which can be verified by past employers and co-workers. Due to the hypothetical nature of situational questions, it is likely that socially sensitive raters will be suspicious or 'on guard' in relation to interviewees' answers. This level of suspicion makes raters more accurate, while also reporting more false-alarms. Therefore, despite offering information of a great quality, judges are more accurate at rating deception in situational than past-behaviour questions (Roulin et al., 2015).

Unlike previously discussed moderators of rating accuracy, there are no research hypotheses pertaining to 'good information'. As seen in Chapter 4, the 'goodness' of the relevant and available information is ensured by developing and testing a unique series of video-recorded mock employment interviews containing both quality and quantity information. Only video-recordings that score highly on ICC (Intra Class Correlation) calculations are included in the study.

### Chapter 3: Rater Training

#### 3.1. Frame of Reference Training (FORT)

**3.1.1. History and Definition.** In the early 1980s, there was a shift away from rater error training towards proactive rater accuracy training methods (Noonan & Sulsky, 2001). Rater error training taught raters to learn new rating response sets which lowered errors (i.e., halo, leniency, central tendency, etc.), while indirectly making raters less accurate according to other measures of accuracy. For example, halo rating error is often based on targets' real behaviours. Training raters to prevent halo errors removes the true variance and error variance in rating scores, resulting in inaccurate ratings (Athey & MacIntyre, 1987; Bernardin & Pence, 1980; Landy & Farr, 1980).

In response, Bernardin and Buckley (1981) developed Frame of Reference Training (FORT) which can be applied in all person perception domains (Roch et al., 2012). Originally, FORT was designed to increase the accuracy of raters' performance evaluations and is commonly used in assessment centres (Roch & O'Sullivan, 2003). FORT teaches trainee raters adaptive rating schemas, resulting in easier and more effective information processing. This is achieved by: providing trainees with a clear definition of relevant behavioural dimensions, and explaining which behaviours pertain to specific performance dimensions, replacing trainees' idiosyncratic rating standards with a common performance prototype (i.e., a common conceptualisation or 'frame of reference'). Ultimately, trained raters' prototypes should be aligned with expert raters' prototypes, both rating targets with the same level of accuracy (McIntyre, Smith, & Hassett, 1984; Schleicher, Day, Mayes, & Riggio, 2002). FORT counteracts raters' loss of information (i.e., forgetting) because they categorise target's performance based on the prototypes taught during training (Athey & McIntyre, 1987; Bernardin & Buckley, 1981; Hauenstein & Foti, 1989; Ilgen & Feldman, 1983; Powell, 2007; Sulsky & Day, 1992, 1994; Woehr, 1994).

In keeping with FORT protocol, a typical training intervention is based on the principles of exposure, practice, and feedback and contains the following steps: First, the multidimensional nature of the construct (e.g., job performance) is emphasised, with each dimension being defined. Second, sample behavioural incidents (i.e., vignettes) of each dimension are provided. Third, as part of exposure, trainers explain how to accurately evaluate each vignette. Fourth, during practice, trainee raters are given the opportunity to

practice evaluating the dimensions on the vignettes provided. Trainee raters must also provide justifications for their ratings. Fifth, trainers provide feedback on the accuracy of trainee raters' practice evaluations. During feedback, trainers inform the trainees of the correct ratings for each vignette based on normative data. Normative data is obtained from expert raters' 'true scores'. Trainers must provide the rationale behind the true scores (Powell & Goffin, 2009; Schleicher et al., 2002).

**3.1.2. Frame of Reference Training and Accuracy.** FORT is widely used because it consistently leads to statistically and practically significant improvements in judgment accuracy (Powell & Goffin, 2009). The effectiveness of FORT has been proven across many different areas of person perception. A meta-analysis by Woehr and Huffcutt (1994) revealed that FORT groups had an effect size of .83 when compared to non-trained control groups (Noonan & Sulsky, 2001). Roch et al. (2012) report an average effect size of .50. The positive effect of FORT on rater accuracy stands the test of time, provided that raters remember the dimensions/categories taught during training (Roch & O'Sullivan, 2003). Sulsky and Day (1994) found that FORT raters' accuracy was no different when tested immediately after FORT vs. when tested 48-hours after training. In contrast, Noble (1997) found that raters were more accurate when tested immediately after FORT, and that trained raters were no more accurate than non-trained raters when tested two weeks after the FORT intervention (Roch & O'Sullivan, 2003).

Although FORT was found to be the most effective training method in Woehr and Huffcutt's (1994) meta-analysis, this method has some disadvantages. FORT might have a negative impact on raters' memory of target behaviours. Sulsky and Day (1992) found that, during assessment, FORT raters rated behaviours that were presented in training, not assessment. Therefore, FORT might lead raters to falsely detect behavioural cues consistent with training, but inconsistent with assessment (Noonan & Sulsky, 2001). Although FORT increases rater accuracy, different operationalisations of accuracy are not equally improved by FORT. Roch et al. (2012) found that FORT was most successful at improving Borman's (1977) differential accuracy, with a moderate to large effect size of (.77). In contrast, Cronbach's (1955) four accuracy indices are all only moderately improved by FORT, with effect sizes in the .40s. Likewise, a moderate effect was seen in observational/behavioural accuracy. Given that FORT had the greatest effect on Borman's (1977) differential accuracy, it is argued that FORT helps raters to accurately categorise targets into general categories, rather than assigning specific numerical values to targets. Whether this is problematic is

determined by the purpose for which raters' ratings are used. In cut-score situations, it is important that raters are able to assign specific true score values to targets. For this purpose, enriched FORT protocols should be followed, such as those suggested by Sulsky and Kline (2007) whereby modelling and role-playing are included in the training. Current FORT protocols are adequate in employment interviews and performance appraisals because raters are required to decide whether an applicant should be hired, terminated, promoted, or rank ordered (Roch et al., 2012).

**3.1.3. Frame of Reference Training and the Realistic Accuracy Model.** FORT compliments Funder's (1995) RAM, as seen in past studies which determined the effect of FORT on rater accuracy in keeping with the model. Powell and Bourdage (2016) assigned 144 undergraduate students to one of the following conditions informed by the stages of RAM: (a) control group, (b) cue detection training, (c) cue utilisation training, (d) cue detection and cue utilisation combination training. Having undergone their specific FORT, all participants rated each target's Big Five personality traits after watching the same five video-recorded interviews. 'Cue detection' training had no effect on raters' accuracy, while personality profile rating accuracy improved with the 'cue utilisation' training. There was a non-significant increase in accuracy with the 'cue detection and cue utilisation combination' training. The most critical way to improve raters' accuracy is argued to be through cue utilisation training. It is noted that one cannot teach cue utilisation without indirectly teaching cue detection. When teaching participants the connections between traits and behaviours, participants indirectly learn what cues look like and how to detect them (Powell & Bourdage, 2016).

## Chapter 4: Method

### 4.1. Research Design

Quantitative data were appropriately collected and analysed because the researcher investigated measurable outcomes (Creswell, 1994). A true experimental design allowed the researcher to make causal claims about the effect of the FORT on participants’ rating accuracy. This was achieved using a two-group post-test only true experimental design (see visual depiction of this study’s post-test only true experimental design in Table 1). Data were collected from individual participants in both the control group (R<sub>1</sub>) and experimental group (R<sub>2</sub>). The unit of analysis in this study is the group – level because individual scores were combined to obtain group scores for each of the three Dependent Variables/DVs (i.e., there is an experimental group score and a control group score for DV<sub>1</sub>, DV<sub>2</sub>, and DV<sub>3</sub> respectively). This study’s variables are: FORT programme (independent variable/IV), DIM cue detection accuracy (DV<sub>1</sub>), DIM cue utilisation accuracy (DV<sub>2</sub>), and DIM profile rating accuracy (DV<sub>3</sub>).

Table 1

*Post-Test Only True Experimental Design*

Group	FORT Intervention	Observation
R <sub>1</sub>		O <sub>1</sub>
R <sub>2</sub>	X	O <sub>2</sub>

*Note.* R<sub>1</sub> = control group; R<sub>2</sub> = experimental group

Stone-Romero (2011) uses the terminology ‘special purpose’ (SP) setting for laboratory experiments vs. ‘nonspecial purpose’ (NSP) setting for field studies. This study was conducted in a SP setting because a computer laboratory was adapted for research purposes, enabling the researcher to manipulate the IV. Adaption was achieved by closing the laboratory’s blinds and door, preventing non-participants from entering the setting, as well as setting up PowerPoint slides pertaining to the study. Computer-based training and assessment was developed specifically for the purpose of this study, supporting the argument that it was conducted in a SP setting. Conducting a two-group post-test only true experimental design in a laboratory experimental (i.e., SP) setting allowed the researcher to maximise control in the following ways:



Firstly, the researcher could randomly assign participants to one of two conditions (i.e., Group 1: Control Group ( $R_1$ ), and Group 2: Experimental/Treatment Group ( $R_2$ )). Random assignment is beneficial because: (1) it helps to reduce bias by distributing participants' idiosyncratic individual characteristics across groups. Having randomly assigned the participants, the researcher was sure of the groups' equivalence prior to manipulating the independent variable (IV). This would not have been possible in a quasi-experimental design (Stone-Romero, 2011). (2) Random assignment allows for the unbiased estimation of error effects (i.e., effects which cannot be attributed to the manipulation of the IV), and (3) Random assignment helps to ensure the statistical independence of error effects (Kirk, 2007).

Secondly, the researcher could manipulate the IV and measure the effect of manipulation on the study's three DVs. FORT was administered to the experimental group ( $R_2$ ). The control group ( $R_1$ ) did not receive FORT. Participants in both groups were not aware of the manipulation (i.e., the control group was not aware that the experimental group received training until debriefing and visa-versa). Due to the experimental design used, the researcher was certain that the cause preceded the effect (i.e., temporal precedence). The researcher is highly certain that the observed effects are due to the manipulation, not confounding variables (i.e., nuisance or third variables), maximising the validity of causal inferences (Stone-Romero, 2011).

Thirdly, unlike a pre-test post-test design, a post-test only design administered each measure once. This was advantageous because the participants' scores were not biased by issues related to repeated measures of the same test. A single administration of each measure was within the scope of this study, saving time and money (Rosnow & Rosenthal, 2014).

Fourthly, to address the dilemma of implementing an experiment with high internal validity and low external validity, the researcher implemented an Experimental Vignette Methodology (EVM). EVM is defined as: 'presenting participants with carefully constructed and realistic scenarios to assess dependent variables including intentions, attitudes, and behaviours' (Aguinis & Bradley, 2014, p. 352). EVM is seen in the development and application of video-recorded mock employment interviews as vignettes in both training and assessment. This stimulus is more true-to-life than the text-based interview transcripts (i.e., 'paper-people' vignettes) used in past studies (e.g., Pieterse, 2016). The use of EVM increased the realism of this study, and allowed the researcher to manipulate the independent variable with a high level of control. Although this true experiment was conducted in a

laboratory (i.e., SP) setting, the researcher enhanced internal validity and external validity (i.e., fidelity) of the study using EVM (Aguinis & Bradley, 2014; Highhouse, 2009).

#### **4.2. Participants**

The sample population included all University of Cape Town (UCT) students. Student participants were selected from this population using a non-probabilistic convenience sampling strategy. From the selected sample, equal numbers of participants were randomly assigned to the experimental and control groups respectively. A total of 109 student participants participated in this study. The control group was comprised of 53 participants, while 56 students participated in the experimental group. In both groups, the majority of students were: female ( $f = 65$ , 59.63%), identified as African ( $f = 63$ , 57.80%), were undergraduate students ( $f = 93$ , 85.32%), studied in the Humanities faculty ( $f = 45$ , 41.29%), did not have interviewer experience ( $f = 84$ , 77.06%), and had been in a candidate position previously ( $f = 81$ , 74.32%). See descriptive statistics per group in Table 2.

Table 2

*Descriptive Statistics: Non-Training (Control) and FORT (Experimental) Groups*

Characteristic	Group						
	Control		Experimental		Total		
	Group ( <i>n</i> = 53)		Group ( <i>n</i> = 56)				
Age							
Mean	21.70		21.50				
SD	4.00		5.84				
Gender	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Male	21	39.6	20	35.7	41	37.61	
Female	31	58.5	34	60.7	65	59.63	
Prefer not to answer	1	1.9	2	3.6	3	2.75	
Race	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Asian	1	1.9	1	1.8	2	1.83	
African	30	56.6	33	58.9	63	57.80	
Coloured	4	7.5	8	14.3	12	11.01	
Indian	9	17.0	5	8.9	14	12.84	
White/Caucasian	8	15.1	9	16.1	17	15.60	
Prefer not to answer	1	1.9	0	0	1	.92	
Level of study	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Undergraduate	44	83.0	49	87.5	93	85.32	
Honours	3	5.7	3	5.4	6	5.50	
Masters	5	9.4	4	7.1	9	8.26	
PhD	1	1.9	0	0	1	.92	
Faculty	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Commerce	12	22.6	10	17.9	22	20.18	
EBE	7	13.2	7	12.5	14	12.84	
Health Sciences	3	5.7	5	8.9	8	7.34	
Humanities	21	39.6	24	42.9	45	41.29	
Law	0	0	1	1.8	1	.92	
Science	10	18.9	9	16.1	19	17.43	
‘Interviewer’ Experience	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	11	20.8	14	25.0	25	22.94	
No	42	79.2	42	75.0	84	77.06	
‘Candidate’ Experience	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	40	75.5	41	73.2	81	74.32	
No	13	24.5	15	26.8	28	25.69	

### 4.3. Procedure

**4.3.1. Developing video-recorded mock employment interviews.** Past studies have measured judges' DIM rating accuracy using paper-based interview transcripts known as 'paper-people' vignettes (e.g., Pieterse, 2016). Paper-people vignettes are valued because researchers have a high level of control over this medium. Participants can also re-read paper-based interviews multiple times, increasing the likelihood of accurate DIM ratings. This study argues that paper-based interviews are not life-like and do not make certain relevant DIM cues available to the judge. In keeping with Funder's (1995) RAM, cues must be both relevant and available for the judge to accurately detect and/or utilise the cue (Powell, 2007; Powell & Bourdage, 2016; Powell & Goffin, 2009). To address this, mock video-recorded interviews were used as behavioural incidents during training and measurement, as done in previous FORT studies (e.g., Powell & Goffin, 2009). Video-recorded mock interviews simulate real-life, making all relevant cues available to the judge and maximising mundane realism (Crano & Brewer, 2002).

The researcher developed all interview transcripts and embedded DIM into each interview (see example transcript in Appendix C). Interview transcripts were based on the example vignettes developed by Pieterse (2016). Each transcript pertains to a different type of job, adding to the richness of the stimuli. Rating candidates' DIM when being interviewed for different types of jobs makes training and assessment cognitively demanding, acting to both challenge and engage participants. Given that the difficulty is higher than that of past researchers (e.g., Pieterse, 2016), poor raters can be better distinguished from average and good raters. Including different types of jobs cancels out the potential influence of participants' own job-related bias. Both past-behavior and situational questions were included. 'Slight image creation' and 'extensive image creation' were collapsed under an umbrella DIM tactic called 'deceptive image creation' (Schneider et al., 2015). Nine interviews were developed for this study (see Appendix D, Table D1).

***Embedding valid DIM cues.*** The researcher exclusively embedded DIM cues found in the seminal study by Schneider et al., (2015), ensuring all DIM cues are valid. Only statistically significant ( $p < .10$ ,  $p < .05$ ) DIM cues were embedded in the interview transcripts. The use of Schneider et al.'s (2015) DIM cues is in keeping with Pieterse (2016).

***Embedding valid DIM narrative/discourse cues.*** All deceptive narrative/discourse cues were based on items from Levashina and Campion's (2007) Interview Faking Behaviour Scale, an internationally recognised and peer reviewed measurement tool published on the PsychTests database. The scale is divided into four components, each measuring a single type

of DIM tactic. All components of Levashina and Campion's (2007) Faking Behaviour Scale are reliable: slight image creation ( $\alpha = .90$ ), extensive image creation ( $\alpha = .95$ ), image protection ( $\alpha = .91$ ), and ingratiation ( $\alpha = .91$ ) (see full scale in Appendix B).

***Video-recording the mock employment interview transcripts.*** Snowball sampling was used to recruit a group of professional actors who acted out the interview transcripts while being filmed. Actors were motivated to participate because they were paid a nominal fee for their time, in addition to gaining experience and a reference letter from the researcher. The same actress played the 'interviewer' to standardise the interviews. A different actor played the 'candidate' in each interview to prevent priming and carry-over effects (Hauptfleisch, 2012). The actress who played the interviewer was paid a flat rate of R1000 (see letter of informed consent in Appendix E). Actors who played the role of candidates were each paid R200 for their time (see letter of informed consent in Appendix F). Actors were required to wear all black business-casual attire, further standardising the targets and preventing potential attire-based bias. All videos were recorded in the same setting from the same angle with the same lighting conditions. Actors were demographically diverse in terms of race and gender, preventing participants' learning and ratings from being influenced by social biases. In total, there was an equal spread of races across targets (i.e., 3 Black (33.33%), 3 White (33.33%), and 3 Coloured (33.33%)). With regards to gender, 3 of the targets were male, and 6 were female. After the removal of Target 4 due to low ICC scores during true score development (discussed under 'true score development' below), the number of black female targets dropped. The final demographics are as follows: Race: 2 Black (25%), 3 White (37.5%), 3 Coloured (37.5%), gender: 3 male (37.5%) and 5 female (62.5%), see descriptive statistics in Appendix D, Table D2. Actors received softcopies of the interview transcripts 10 days before filming, ensuring they had enough time to learn their scripts. Filming took place at the researcher's house over a period of two days. Sound and lighting film equipment was hired from the UCT TV studio, guaranteeing all actors were audible and lighting was standardised across videos. Two past post-graduate students from UCT's Department of Film and Media helped the researcher to film and edit the videos, adding to the quality of the stimuli and the participants' observed face-validity.

***True score development.*** Subject Matter Experts' (SMEs) ratings, in combination with past research findings by Schneider et al., (2015) as well as Levashina and Campion (2007), were used as sources of 'true scores'. A group of 11 UCT Organisational Psychology masters students were asked to act as SMEs. SMEs voluntarily agreed to partake and signed

letters of informed consent prior to partaking (see Appendix G). True score development was conducted in a face-to-face setting, over 60 minutes. The SMEs watched all 9 of the video-recorded mock interviews together. Videos were screened using a projector in one of UCT's lecture venues. SMEs were given a pack of 9 worksheets (see example of a 'true score' worksheet in Appendix H). The researcher completed the first worksheet alongside the SMEs as a 'practice example'. The first worksheet pertained to a video-recorded mock interview in which a doctor was interviewed for a position at Red Cross War Memorial Children's Hospital. Due to the researcher's involvement, there was high inter-rater agreement on 'Target 1' during ICC calculations. All subsequent worksheets were completed by the SMEs independently.

Question A on the worksheet consisted of a list of 15 times (e.g., 1:34). The list of times on each worksheet was tailored to individual video-recorded mock interviews. Videos were paused at the times denoted on their corresponding worksheet. SMEs circled 'yes' when they thought that the video was paused on a deceptive cue, and 'no' when they thought the cue was either non-deceptive, or no cue was present.

SMEs completed Questions B – D immediately after watching each video-recorded mock employment interview. Question B and C consisted of 6 items on 5-point Likert-type scales (1 = 'to no extent', to 5 = 'to a very great extent'). The 5-point Likert-type scales were used to rate the extent to which each candidate was (1) honest and (2) deceptive (Question B), as well as the extent to which each candidate engaged in (3) deceptive image creation, (4) deceptive ingratiation, and (5) deceptive image protection (Question C). The final question, Question D, asked the SMEs to rate the degree of realism of each video-recorded mock employment interview from 1 -10 ('unrealistic' = 1-3, 'moderately realistic' = 4 – 7, 'highly realistic' = 8 – 10).

Resulting data were captured and cleaned in Microsoft Excel. Following this, ICC calculations were run to determine rater agreement using IBM's Statistical Package for the Social Sciences (SPSS). The researcher aimed to reject one target with the lowest inter-rater agreement across the ICC single measure, ICC average measure, and ICC alpha. The decision was made to remove 'Target 4' because the SMEs could not agree on this target's ratings. The inter-rater agreement on Question A was particularly concerning because this question measured DIM cue detection accuracy. It is unlikely that accurate ratings will be made if DIM cues are not (a) made available to the rater and/or (b) detected by the rater. Therefore, because there was low inter-rater agreement on Question A for Target 4, the researcher concluded that the actress did not make the relevant deceptive cues available for detection.

With regard to Question A, Target 4 scored the lowest across all targets: ICC single measures test .12 ( $M = .33$ ), ICC average measures test .60 ( $M = .79$ ), and ICC = .59 ( $M = .80$ ). Target 4 was scored as being unreliable because  $\alpha = .59$ . The remaining eight targets had high inter-rater reliability among the SMEs ( $.68 < \alpha < .98$ ).

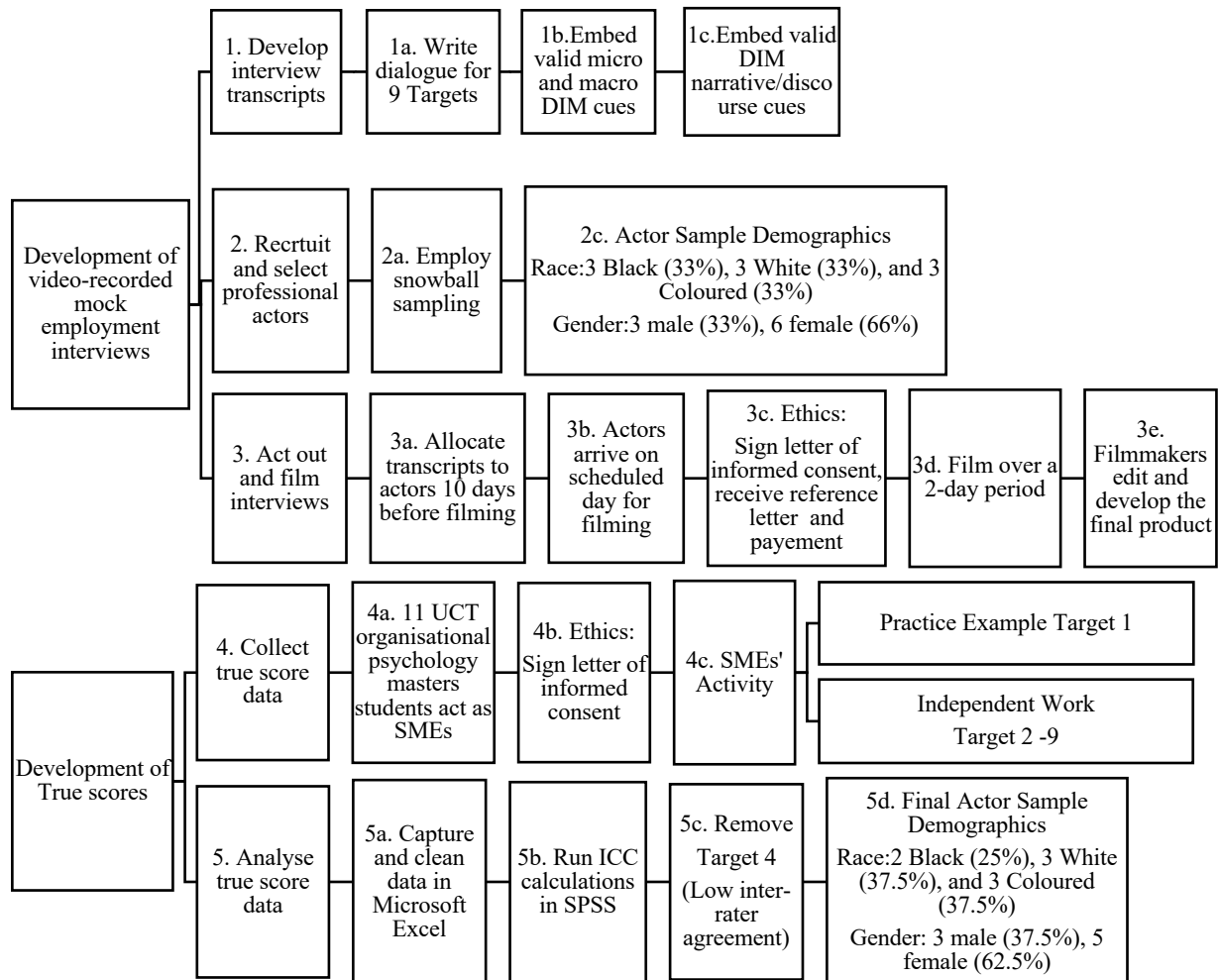


Figure 2. Flowchart depicting development of video-recorded mock employment interviews and true scores.

**4.3.2. Convenience sampling and random assignment.** Having obtained ethical clearance from the Faculty of Commerce Ethics in Research Committee at UCT (Appendix I) and approval to sample UCT students from the Department of Student Affairs (Appendix J), a non-probabilistic convenience sampling strategy was carried out as follows:

As per the researcher's request, the Department of Student Affairs of UCT sent out an email advertising the study to 24 000 UCT student subscribers (see Appendix K). The researcher offered a nominal financial research participation incentive of R100 in cash per participant. For fairness and ethical compliance, participants were awarded the same amount regardless of their group allocation and/or time spent participating. The research participation incentive amount was based on similar training studies conducted in America (i.e., \$5 – 10 per participant). A secondary Gmail account (i.e., [uctresearchstudy@gmail.com](mailto:uctresearchstudy@gmail.com)) was used for the purpose of this study, providing a secure platform on which participants could communicate with the researcher. After the study, the Gmail account was deleted to ensure the future confidentiality and anonymity of participants. Of the 24 000 students who received the advertisement email, 422 students RSVP'd to the invitation, revealing a primary response rate of 1.76%. Due to time and cost constraints, participation was awarded on a first-come-first-serve basis to the first 192 students who RSVP'd. From the selected sample of 192 students, the researcher randomly assigned equal numbers of student participants to the control and experimental groups. Each group was further divided into sub-groups (i.e. four control sub-groups and four experimental sub-groups). Due to a high dropout rate among student participants in the experimental group, the researcher added an additional experimental sub-group on the last day of training (i.e., in total, the study contained four control sub-groups and five experimental sub-groups). To create an additional group, 24 student participants were randomly selected from the 230 individuals who were not selected previously. The addition of a ninth sub-group was required to balance the number of participants in the experimental and control groups. From the total sample of 216 (i.e.,  $192 + 24 = 216$ ) students who were given the opportunity to participate, only 109 students arrived on the day of the study (i.e., a secondary response rate of 50.46%). The overall response rate was .45% (i.e., 109 of the 24 000 UCT students who received the email attended). See convenience sampling and random assignment flowchart in Figure 3.



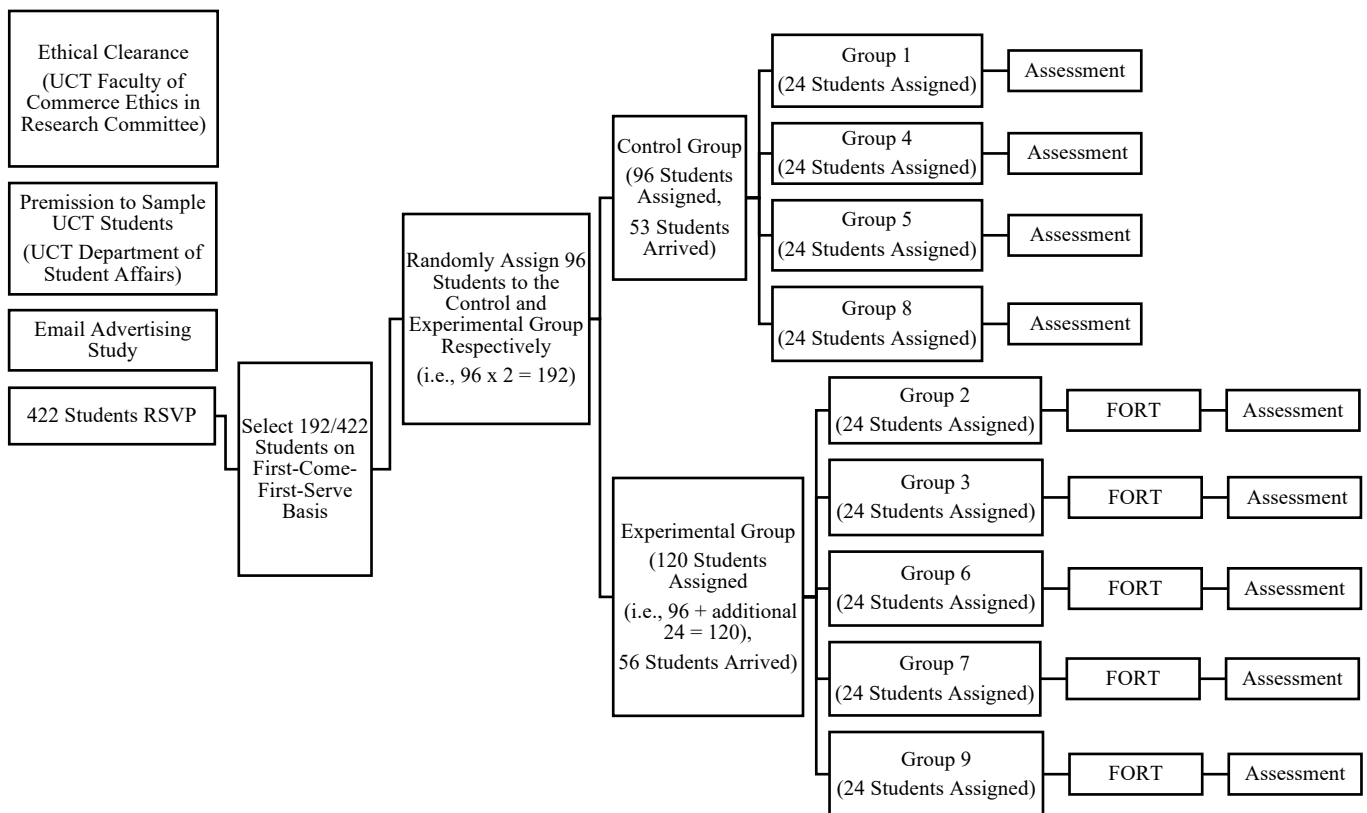


Figure 3. Flowchart depicting convenience sampling and random assignment.

**4.3.3. Implementing training and assessment.** Supervised computer-based training and assessment were needed, requiring the study to be held in one of UCT's postgraduate computer laboratories every day from 11:00 – 14:00 for one week. The computer laboratory had a maximum capacity of 24 students. To reduce the biasing effect of time-related confounding variables, the control and experimental groups' sessions were held at alternating times each day. The control groups' session was approximately 60 minutes, and the experimental groups' session was approximately 120 minutes (see control and experimental groups' PowerPoint slides in Appendix M and N respectively). On day 1, the control group session was held from 11:00 – 12:00, while the experimental group session ran from 12:00 – 14:00. On day 2, the order was reversed: the experimental group session was facilitated from 11:00 – 13:00, and the control group session was held from 13:00 – 14:00. This alternating pattern continued every second day for the duration of the week.

**4.3.4. Ethical compliance.** In keeping with the APA ethical research guidelines for conducting research with human participants, the following ethical guidelines were followed:

All participants were required to sign a letter of informed consent before the study commenced, regardless of their group allocation (see participants' letter of informed consent on the first two pages of the Qualtrics assessment in Appendix L). Informed consent was provided online: after reading their letters, participants agreed to participate by clicking 'yes' on Qualtrics. Students who did not consent to participation left the venue without any negative consequences before the researcher proceeded with the study.

Participants' confidentiality and anonymity was ensured. Participants were given the choice of either providing (a) their email addresses, or (b) an anonymous identity (e.g. Participants\_123) on their letter of informed consent. None of the participants chose to provide an anonymous identity. This information remained confidential, it was kept separate from their results, and was not used to identify participants. Participants were emailed from the research Gmail account when their research participation incentives were ready for collection.

Participants were asked to provide demographic information (Appendix L). This information was used to calculate sample statistics only. In keeping with UCT's ethical requirements, participants were given the option 'prefer not to answer' for race and gender questions.

This study included a level of deception (i.e., participants were unaware of: (a) the true purpose of this study, and (b) their experimental/ control group allocation). Therefore, a process of debriefing occurred immediately after data collection, both in person and via email. For fairness, participants in the control group were offered training after the study on a voluntary basis. From the 53 control participants, only 1 participant expressed the desire to receive training. The researcher provided training to the control group participant on an individual basis at the end of UCT's third term. In keeping with ethical requirements, the control group participant signed a letter of informed consent before the additional voluntary training commenced (Appendix O).

## **4.4. Materials**

**4.4.1. Training Materials.** This study's training programme was approximately 60 minutes long and covered the traditional FORT stages of: exposure, practice, and feedback

(Powell & Goffin, 2009). The researcher started the training programme by introducing the study and asked participants to sign a letter of informed consent, see slide labelled 'today's session agenda' in Appendix N.

**Exposure.** The researcher gave a short lecture on DIM (approximately 20 minutes). The lecture included information about each DIM tactic and the corresponding DIM cues (Appendix N). Information on DIM cues was based on Schneider et al.'s (2015) seminal study. Content pertaining to participants' deceptive narratives was taught using items from Levashina and Campion's (2007) Interview Faking Behaviour Scale.

**Practice.** 'Practice' was comprised of two tasks: an 'example task' and a 'practice task'. The researcher went through the 'example task' with the participants. This task consisted of one short video-recorded mock interview (i.e., vignette). As a group, the researcher paused the video when a DIM cue was detected. The researcher explained: (a) why this was a DIM cue and (b) which type of DIM tactic the cue manifested (i.e., cue utilisation). Following this, participants completed a 'practice task' individually.

The 'practice task' consisted of two short video-recorded mock interviews with corresponding worksheets which stated: (1) 15 times denoting deceptive and non-deceptive cues, as well as (2) rating scales. The researcher paused the videos at specific times while the participants watched. Once paused, participants circled 'yes' on their worksheets if they thought there was a deceptive cue present, or 'no' if they thought there was no cue/ the cue was non-deceptive. After each interview, the participants rated the extent to which each candidate engaged in each type of DIM tactic, as well as the degree of realism of each interview. Having completed the above, participants shared and discussed their ratings with the student(s) sitting next to them (see slide labelled 'sharing and discussion in Appendix N).

**Feedback.** The researcher went through the practice task with the participants to correctly detect and utilise the relevant and available DIM cues, while justifying why these ratings were correct. True scores/correct ratings were informed by Schneider et al., (2015), Levashina and Campion (2007), as well as the results from true score development.

**4.4.2. Assessment Materials.** Control and experimental group participants completed the same assessment on an online data collection platform, Qualtrics (see Appendix L). Assessment measured participants' accuracy in keeping with each stage of Funder's (1995) RAM. Raters' DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy were measured independently by three subtests (i.e., DIM Test 1, 2, and 3).

***DIM Cue Detection.*** The first sub-test (i.e., DIM Test 1) measured participants' DIM cue detection accuracy. Participants watched two video-recorded mock interviews. When they detected a deceptive cue, participants paused the video and wrote the time in the space below the video. The time of the deceptive cue was written in the following format: 1:34 (i.e., 1 minute 34 seconds). True scores were obtained by combining the SMEs' ratings, Schneider et al.'s (2015) findings, and Levashina and Campion's (2007) scale.

***DIM Cue Utilisation.*** The second sub-test (i.e., DIM Test 2) measured participants' DIM cue utilisation. A grid was provided with DIM cues on the vertical axis and DIM tactics on the horizontal axis, based on the Trait Induction Measure developed by De Kock et al. (2015). DIM Test 2 consisted of 15 randomly ordered items (i.e., items were not ordered according to the types of DIM tactic they represented). Each DIM item included: (a) a randomly selected narrative/discourse cue from the Interview Faking Behaviour Scale. Only valid items (i.e., items scoring  $>.75$ ) on Levashina and Campion's (2007) EFA were included (see Appendix P). (b) A corresponding verbal or non-verbal DIM cue from Schneider et al. (2015). Participants utilised their knowledge to match each item on the vertical axis with its corresponding DIM tactic on the horizontal axis. For example: The following DIM item: 'The candidate tries to exaggerate the interviewer's qualities to create the impression that they think highly of the interviewer (candidate is attentive to the interviewer)' matched the DIM tactic: 'Deceptive Ingratiation' (see example items in Appendix Q).

***Overall DIM Profile Rating Accuracy.*** This study's final sub-test (i.e., DIM Test 3) measured participants' overall DIM profile judgement accuracy. DIM Test 3 consisted of: (a) three video-recorded mock interviews and (b) a six-item questionnaire administered after each interview. In each interview, the candidate expressed one dominant type of DIM tactic, as follows: Interview 3A: Deceptive Ingratiation ('lawyer' candidate), Interview 3B: Deceptive Image Protection ('waitress' candidate), Interview 3C: Deceptive Image Creation ('pilot' candidate). After watching each interview, participants completed a short questionnaire. Participants rated: (1) the extent to which the candidate was honest and deceptive, (2) the extent to which the candidate engaged in each DIM tactic. The questionnaire's first five items were measured using a 5-point Likert-type scale (1 = 'to no extent', 5 = 'to a very great extent'). These anchors are in keeping with the Interview Faking Behaviour Scale by Levashina and Campion's (2007). An example item is: 'In your opinion, please rate the extent to which the candidate engaged in Deceptive Image Creation.' The questionnaire's final item asks participants to rate: (1) the extent to which each candidate was

honest and deceptive, and (2) the video’s degree of realism on a scale from 1 – 10, in keeping with Pieterse (2016). True scores were based on SMEs’ ratings. See DIM Test 3 in Appendix L.

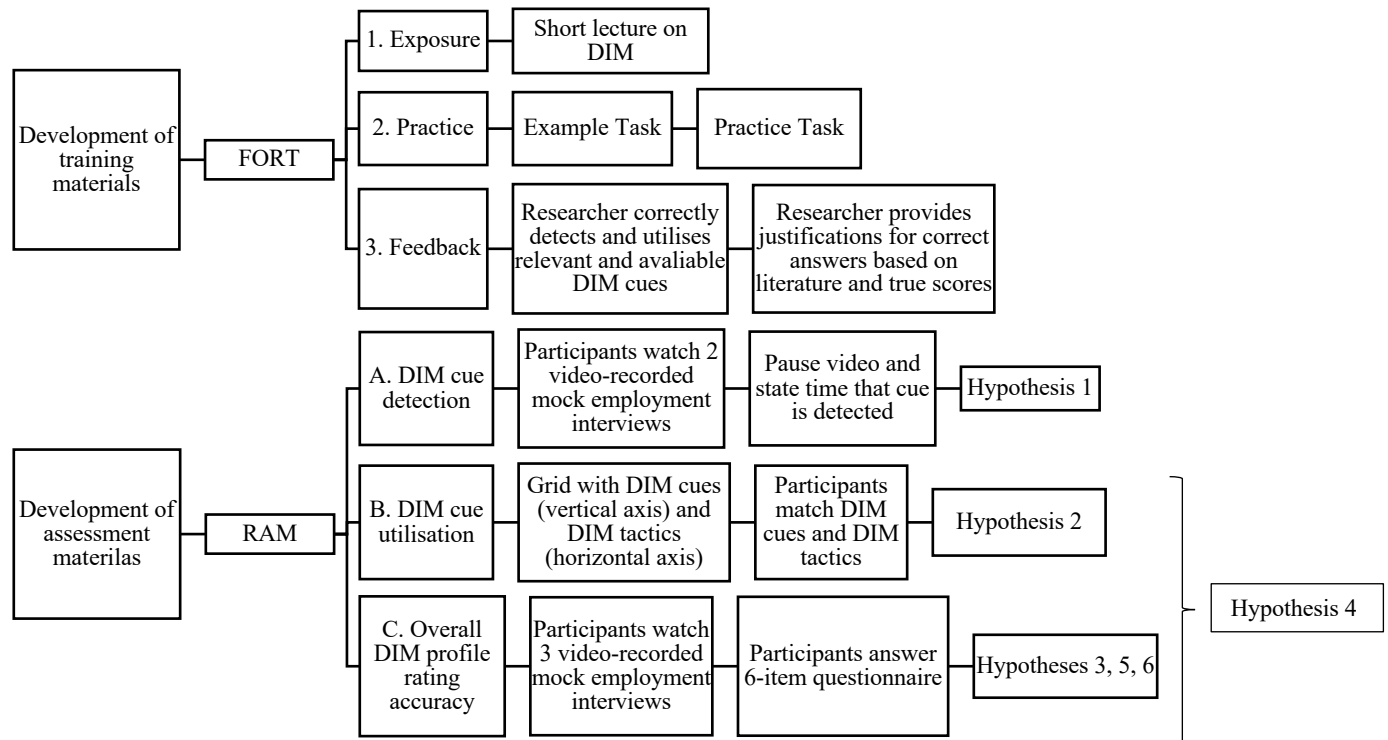


Figure 4. Flowchart depicting development of training and assessment materials, as well as corresponding hypotheses.

## 4.5. Analysing and Interpreting Results

**4.5.1. Checking the Data and Statistical Analyses.** After exporting the raw data from Qualtrics, cleaning and coding were performed using Microsoft Excel and IBM’s Statistical Package for the Social Sciences (SPSS) respectively. Data were later analysed quantitatively using SPSS and G\*Power 3.1. Descriptive statistics were calculated in SPSS to describe the study’s sample at the group-level. When testing this study’s hypotheses, the following tests were run in SPSS: Mann-Whitney U tests, independent samples t-tests, and Spearman rank-order correlations. G\*Power was used to determine the power of this study’s findings. The results of these statistical analyses are discussed in Chapter 5.

**4.5.2. Procedure for Calculating Accuracy Scores.** Hypothesis 1 determined rating accuracy in keeping with Lord’s (1985) operationalisation. The researcher calculated the total

number of DIM cues detected, the number accurately detected DIM cues (i.e., true positives), the number of inaccurately detected DIM cues (i.e., false positives), the number of relevant DIM cues that were ignored (i.e., missed cues), and the participants' negative marking scores in Microsoft Excel. When coding the data, the researcher used a 2 second tolerance level (i.e., scores 2 seconds before and after the true score were marked as 'correct'). This decision was backed by Jain, Bansal, Kumar, and Singh (2015) who found that students have an Auditory Reaction Time (ART) of 250.12 – 135.00 milliseconds on average, and mean Visual Reaction Time (VRT) of 229.80 - 219.05 milliseconds. Correct scores could fall 2 seconds before and after the coded 'true score' because participants might state the time of a cue at the beginning, middle, or end of its presentation.

Hypothesis 3 determined accuracy in keeping with both Cronbach (1955) and Borman (1977). Cronbach's (1955) four accuracy indices (i.e., EL, DE, SA, DA) were calculated by editing pre-existing SPSS syntax provided by the researcher's supervisor. Having appropriately included the variables of interest, SPSS syntax was used to compute accuracy scores for each participant. Formulae were provided by Sulsky and Balzer (1988), Cardy and Dobbins (1994) as well as Murphy, Martin, and Garcia (1982) (Appendix R). Borman's (1977) Differential Accuracy index was calculated by correlating each rater's rating of a target on a specific dimension with the true score for that dimension across targets. True scores were based on SMEs' ratings. This yielded a differential accuracy score per dimension of interest. A Fisher's *r*-to-*z* transformation was then performed to average the correlation across dimensions, revealing an overall differential accuracy score per participant (Pieterse, 2016).

## Chapter 5: Results

### 5.1. Reliability and Validity

Internal consistency reliability analysis was not appropriate for the data gathered in either the DIM cue detection task or the DIM cue utilisation task (i.e., DIM Test 1 and 2). Reliability analysis was only conducted for the data derived from the overall DIM Test 3, as seen in section 5.4.3. (Letzring, 2008). Neither confirmatory factor analysis (CFA) nor exploratory factor analysis (EFA) were appropriate because each group's sample size was too small (Field, 2013).

### 5.2. Preliminary Analyses

Preliminary Analyses were run to test the raw data for assumptions of multivariate tests. The following assumptions were tested: outliers, linearity and homoscedasticity, independence, and normality (Field, 2013).

**5.2.1. Outliers.** Because outliers are sometimes accurate indicators of top performers, a conservatively high cut-off point was used in this study. Only extreme outliers were removed in keeping with the best practice guidelines outlined by Aguinis, Gottfredson, and Joo (2013). Outlier removal was as follows: Firstly, all relevant raw data points were transformed into  $z$ -scores in SPSS. Secondly, data points were removed if their transformed  $z$ -scores represented an 'extreme outlier' (i.e., data points with  $z$ -score  $> 3.29$ ,  $p < .001$ ). Thirdly, a total of 37 data points were removed, leaving cases with missing values.

**5.2.2. Linearity and Homoscedasticity.** The assumptions of linearity and homoscedasticity were initially tested by visually inspecting scatterplots, plotting the standardised residuals against the standardised predicted values. Data meet the assumptions of linearity and homoscedasticity because the data points are randomly distributed (i.e., points do not form a funnel-shape) (Field, 2013). A further statistical test (i.e., Levene's test of homogeneity of variance) was run to re-test the assumption of homoscedasticity.

**Levene's test.** Homogenous (i.e., equal) variance across conditions (i.e., control and experimental groups) is an assumption of parametric tests (Field, 2013). Results from Levene's test confirm that there is equal variance between the control and experimental group in this study because  $p > .05$  for all tasks, DIM cue detection task ( $F = 2.93$ ,  $p = .09$ ); DIM

cue utilisation task ( $F = .247, p = .62$ ); and overall DIM profile rating task is marginally insignificant when rounded to two decimal places ( $F = 3.79, p = .05$ ).

**5.2.3. Independence.** The assumption of independence, or independent errors, was tested using the Durbin-Watson test which determines whether residuals are correlated. When residuals are uncorrelated (i.e., independent), the assumption of independence is met (Field, 2013). This assumption was met because the values on all three tasks fall between 1 – 3, with values closely approximating 2, as seen in Table 3:

Table 3  
*Durbin-Watson Test of Independence*

	Durbin-Watson
DIM Cue Detection Task	1.89
Total Responses	1.74
True Positives	1.97
False Positives	1.64
Missed Cues	1.97
Negative Marking	1.50
DIM Cue Utilisation Task	1.82
Deceptive Image Creation Utilisation	2.07
Deceptive Ingratiation Utilisation	2.18
Deceptive Image Protection Utilisation	2.18
Overall DIM Profile Rating Task	1.93
Overall Deceptive Image Creation Profile	2.06
Overall Deceptive Ingratiation Profile	1.93
Overall Deceptive Image Protection Profile	2.01

**5.2.4. Normality.** Normality was initially tested by visually investigating histograms. Because several histograms did not represent the normal distribution, the researcher decided to further test this assumption. Results pertaining to kurtosis and skewness show that the data is non-normally distributed. Shapiro-Wilk test results confirm that the some data are non-normally distributed because  $p < .05$ , as seen in Table 4 (Field, 2013). To accommodate the violation of the assumption of normality, this study used non-parametric hypothesis testing procedures when appropriate.



Table 4  
*Shapiro-Wilk's Test of Normality of Data: Control and Experimental (FORT) Groups*

Scale	Shapiro-Wilk					
	Control Group			Experimental Group		
	<i>W</i>	<i>df</i>	<i>p</i>	<i>W</i>	<i>df</i>	<i>p</i>
DIM Cue Detection Task	.94	53	.01*	.94	56	.00*
Total Responses	.91	53	.00*	.97	56	<b>.22</b>
True Positives	.96	53	<b>.08</b>	.86	56	.00*
False Positives	.87	53	.00*	.94	56	.01*
Missed Cues	.96	53	<b>.08</b>	.90	56	.00*
Negative Marking	.95	53	.02*	.92	56	.00*
DIM Cue Utilisation Task	.88	53	.00*	.96	56	<b>.07</b>
Deceptive Image Creation Utilisation	.92	53	.00*	.93	56	.00*
Deceptive Ingratiation Utilisation	.77	53	.00*	.32	56	.00*
Deceptive Image Protection Utilisation	.46	53	.00*	.52	56	.00*
<b>Overall DIM Profile Rating Task</b>	<b>.98</b>	<b>53</b>	<b>.34</b>	<b>.96</b>	<b>56</b>	<b>.09</b>
Deceptive Image Creation Profile	.97	53	<b>.13</b>	.95	56	.01*
Deceptive Ingratiation Profile	.91	53	.00*	.94	56	.01*
Deceptive Image Protection Profile	.97	53	<b>.26</b>	.94	56	.01*

*Note.*  $p < .05$ \* indicative of non-normal distribution

### 5.3. Descriptive Statistics

Table 5 reports the descriptive statistics of the study variables within each condition.

Table 5

*Descriptive Statistics for Study Variables within Each Condition*

	Group									
	Control Group					Experimental Group				
	<i>n</i> = 53					<i>n</i> = 56				
Scale	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
DIM Cue Detection Task	3.40	3.60	.87	2.20	6.10	4.55	4.59	.70	2.00	6.10
Total Responses	5.00	6.26	3.43	1.50	17.00	9.00	9.20	3.03	1.00	16.50
True Positives	2.00	2.36	1.19	.00	5.00	4.50	4.25	.97	.50	6.00
False Positives	3.00	3.79	2.49	1.00	12.00	4.50	4.95	2.93	.00	12.00
Missed Cues	7.50	7.14	1.19	4.50	9.50	5.00	5.23	.91	3.50	8.50
Negative Marking	-1.00	-1.55	2.03	-8.00	2.00	-.25	-.70	3.15	-9.00	4.00
DIM Cue Utilisation Task	2.05	2.05	.11	1.60	2.24	2.06	2.07	.08	1.81	2.24
Deceptive Image Creation Utilisation	1.29	1.36	.24	1.00	1.86	1.36	1.34	.22	1.00	1.86
Deceptive Ingratiation Utilisation	2.00	1.90	.20	1.25	2.25	2.00	1.98	.07	1.75	2.00
Deceptive Image Protection Utilisation	3.00	2.88	.29	1.50	3.00	3.00	2.89	.24	2.00	3.00
Overall DIM Profile Rating Task	3.08	3.02	.38	1.83	3.92	3.00	3.05	.30	2.17	3.75
Overall Deceptive Image Creation Profile	2.50	2.57	.56	1.25	4.00	2.75	2.75	.58	1.25	3.75
Overall Deceptive Ingratiation Profile	3.25	3.20	.43	2.25	4.25	3.00	3.07	.41	1.75	4.00
Overall Deceptive Image Protection Profile	3.25	3.28	.54	1.25	4.50	3.25	3.34	.37	2.75	4.25

*Note. Descriptive statistics for Overall DIM Profile Rating Task were computed using raw data.*

#### 5.4. Testing of Hypotheses

See summary results for all hypotheses in Appendix S. Mann-Whitney U tests (i.e., the non-parametric version of independent samples t-tests) were appropriately used when comparing the medians of the control and experimental groups in Hypotheses, 1, 2, 5, and 6 as well subsequent corresponding sub-hypotheses (i.e., Hypothesis 1a – 1e, 2a – 2c, 5a – 5c, and 6a – 6c), see Table S1. Data pertaining to Hypothesis 3 was normally distributed, necessitating the use of an independent samples t-test (Table S2). A non-parametric Spearman's rank order correlation analysis was used to test Hypothesis 4a – 4c (Table S3). For the purpose of this study, a significance level of  $p < .05$  was deemed appropriate. The researcher ran effect size and power analyses for all causal hypotheses. In keeping with Leech, Barrett, and Morgan (2011), the strength of Cohen's  $d$  effect size was interpreted as follows:  $d = .20$ : effect size is small or smaller than typical,  $d = .50$ : effect size is medium or typical,  $d = .80$ : effect size is large or larger than typical, and  $d \geq 1.00$ : effect size is much larger than typical. G\*Power was used to conduct power analyses (Cunningham & McCrum-Gardner, 2007). See summary of effect sizes and statistical power for all Mann-Whitney U tests and independent samples t-tests in Table S4. The word 'Hypothesis' is abbreviated to 'H', and 'null hypothesis' to 'H<sub>0</sub>'.

**5.4.1. FORT effect on DIM cue detection.** Overall, results show that the experimental group was more accurate at detecting DIM cues than the control group.

**Hypothesis 1.** H<sub>1</sub> stated that the experimental group would detect DIM cues more accurately than the control group. There was a statistically significant difference between DIM cue detection accuracy in the control group ( $Mdn = 3.40$ ) and the experimental group ( $Mdn = 4.55$ ),  $U = 527.00$ ,  $z = -5.81$ ,  $p < .001$ ,  $M = 4.11$ , CI [3.93, 4.28]. H<sub>1</sub> was accepted and H<sub>0</sub> was rejected. H<sub>1</sub> had an effect size much larger than typical ( $d = 1.25$ ), and power = .96.

**Hypothesis 1a.** H<sub>1a</sub> hypothesised that the experimental group would detect more DIM cues than the control group. In support of H<sub>1a</sub>, a statistically significant difference was found. The experimental group ( $Mdn = 9.00$ ) detected more DIM cues than the control group ( $Mdn = 5.00$ ),  $U = 701.00$ ,  $z = -4.75$ ,  $p < .001$ ,  $M = 7.77$ , CI [7.10, 8.44]. H<sub>0</sub> was rejected and H<sub>1a</sub> was accepted. H<sub>1a</sub> had a large effect size ( $d = .91$ ), and power = .95.

**Hypothesis 1b.** H<sub>1b</sub> claimed that, when detecting DIM, the experimental group would have more accurate hits (i.e., true positives) than the control group. In support of this claim, the

control group ( $Mdn = 2.00$ ) had statistically significantly less true positives than the experimental group ( $Mdn = 4.50$ ),  $U = 337.00$ ,  $z = -7.01$ ,  $p < .001$ ,  $M = 3.33$ ,  $CI [3.06, 3.60]$ .  $H_{1b}$  was accepted and  $H_0$  was rejected.  $H_{1b}$  had an effect size much larger than typical ( $d = 1.74$ ), and power = .97.

**Hypothesis 1c.** According to  $H_{1c}$ , when detecting DIM, the experimental group would have less inaccurate hits (i.e., false positives) than the control group. Although there was a statistically significant difference between the groups, results showed that the experimental group ( $Mdn = 4.5$ ) had statistically significantly more false-alarm responses than the control group ( $Mdn = 3.00$ ),  $U = 1106.00$ ,  $z = -2.29$ ,  $p = .02$ ,  $M = 4.39$ ,  $CI [3.85, 4.91]$ .  $H_{1c}$  was rejected and  $H_0$  was accepted.  $H_{1c}$  had a medium effect size ( $d = .42$ ), and power = .95.

**Hypothesis 1d.**  $H_{1d}$  stated that, during the cue detection task, the experimental group would miss less DIM cues than the control group. The number of missed cues in the experimental group ( $Mdn = 5.00$ ) was statistically significantly different to the control group ( $Mdn = 7.50$ ),  $U = 329.00$ ,  $z = -7.06$ ,  $p < .001$ ,  $M = 6.16$ ,  $CI [5.89, 6.43]$ , with the experimental group missing significantly less DIM cues than the control group.  $H_{1d}$  was accepted and  $H_0$  was rejected.  $H_{1d}$  had a much larger effect size than typical ( $d = 1.80$ ), and power = .96.

**Hypothesis 1e.**  $H_{1e}$  hypothesised that the experimental group would score better on 'negative marking' when detecting DIM cues than the control group. The experimental group ( $Mdn = -.25$ ) scored statistically significantly better on 'negative marking' than the control group ( $Mdn = -1.00$ ),  $U = 1113.50$ ,  $z = -2.25$ ,  $p = .02$ ,  $M = -1.11$ ,  $CI [-1.62, -.60]$ . Based on the results,  $H_0$  was rejected and  $H_{1e}$  was accepted.  $H_{1e}$  had a small effect size of ( $d = .32$ ), and power = .95.

**5.4.2. FORT effect on DIM cue utilisation.** All hypotheses pertaining to DIM cue utilisation were found to be non-statistically significant, showing that the experimental group did not utilise DIM cues more accurately than the control group. Although there is no difference in the groups' DIM cue utilization accuracy, both groups were highly accurate. As seen in the median scores for hypotheses 2, 2a – 2c, ratings matched the true scores provided by Schneider et al. (2015) as well as Levashina and Campion (2007).

**Hypothesis 2.**  $H_2$  stated that the experimental group would be better at utilising DIM cues than the control group. There was no statistical difference in DIM cue utilisation accuracy between the control group ( $Mdn = 2.05$ ) and the experimental group ( $Mdn = 2.05$ ),  $U = 1358.50$ ,

$z = -.77, p = .44, M = 2.06, CI [2.04, 2.08]$ .  $H_0$  was accepted and  $H_2$  was rejected. The effect size for  $H_2$  was smaller than typical ( $d = .23$ ), with power = .95.

**Hypothesis 2a.**  $H_{2a}$  hypothesised that the experimental group would be more accurate at utilising DIM cues pertaining to deceptive image creation than the control group. Deceptive image creation cue utilisation did not differ significantly between the control group ( $Mdn = 1.29$ ) and the experimental group ( $Mdn = 1.36$ ),  $U = 1442.50, z = -.26, p = .80, M = 1.35, CI [1.31, 1.39]$ .  $H_0$  was accepted and  $H_{2a}$  was rejected.  $H_{2a}$  had a small effect size ( $d = .10$ ), and power = .95. Although  $H_{2a}$  was rejected, participants' median ratings matched median true scores ( $Mdn = 1$ ), making both groups equally accurate at utilising deceptive image creation cues.

**Hypothesis 2b.**  $H_{2b}$  claimed that, when utilising DIM cues pertaining to deceptive ingratiation, the experimental group would be more accurate than the control group. In support of  $H_{2b}$ , it was found that deceptive ingratiation cue utilisation accuracy differed significantly between the control group ( $Mdn = 2.00$ ) and the experimental group ( $Mdn = 2.00$ ),  $U = 1125.50, z = -2.85, p < .05, M = 1.94, CI [1.91, 1.97]$ . Because there is a significant difference, but the medians are the same for the control and experimental group, the rank sum scores for each group were inspected. Inspection of the rank sum scores revealed that the experimental group (3438.50) was statistically significantly better at utilising DIM cues pertaining to deceptive ingratiation than the control group (2556.50) (n.a., 2018). Therefore,  $H_0$  was rejected and  $H_{2b}$  was accepted.  $H_{2b}$  had a typical effect size ( $d = .55$ ), power = .95.

**Hypothesis 2c.**  $H_{2c}$  stated that the experimental group would be more accurate at utilising DIM cues pertaining to deceptive image protection than the control group. Deceptive image protection cue utilisation accuracy did not differ significantly between the control group ( $Mdn = 3.00$ ) and the experimental group ( $Mdn = 3.00$ ),  $U = 1453.00, z = -.27, p = .79, M = 2.89, CI [2.84, 2.93]$ .  $H_{2c}$  had a small effect size ( $d = .02$ ), and power = .95.  $H_0$  was accepted and  $H_{2c}$  was rejected. Both groups' median scores match the median true score for deceptive image creation cue utilisation ( $Mdn = 3$ ). It is concluded that the control and experimental groups are equally accurate at utilising DIM cues pertaining to this tactic.

**5.4.3. FORT effect on rating accuracy.** Hypotheses concerning overall DIM profile rating accuracy, the relationships between the stages of RAM, as well as the 'good trait' and 'good target' were tested using the data collected during the third task. Raw data were used when

testing assumptions and determining the sample descriptive statistics, as seen in sections 5.2. and 5.3. Having done this, raw data was transformed in keeping with Cronbach's (1955) and Borman's (1977) respective operationalisations of rating accuracy. Cronbach's (1955) accuracy components' cell means are seen in Table 6, with lower scores indicating greater accuracy (Powell, 2007). In contrast to Cronbach (1955), higher scores on Borman's (1977) differential accuracy indicate greater accuracy. Borman's (1977) differential accuracy scores were used when determining the reliability of task 3 and testing Hypotheses 3, 4, 5, 6. Reliability analysis was appropriately performed for this data, as seen 5.4.4.

Table 6

*Means for Cronbach's Accuracy: All Traits*

SME Ratings as Criterion					
Accuracy Component	Group				Cohen's <i>d</i>
	Control		Experimental		
	<i>n</i> = 53		<i>n</i> = 56		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
EL	.39	.30	.27	.22	.46
DA	.81	.22	.88	.22	.36
DE	.49	.26	.51	.21	.10
SA	.78	.37	.62	.26	.48

**5.4.4. Reliability of accuracy scores.** Reliability was calculated for each judge-target pair using Borman's (1977) accuracy scores in keeping with Letzring (2008). First, the level of agreement with the three sources of criterion ratings were averaged. This resulted in three scores per rater (i.e., one score per target). Secondly, the resulting scores were used to run alpha reliability ( $\alpha = .46$ ). This alpha value seems low for a reliability score, but it is in keeping with Letzring's (2008) alpha reliability (i.e.,  $\alpha = .48$ ). Because there is a statistically significant correlation between the ratings for target one and target three ( $r = .25, p = .01$ ) as well as target two and target three ( $r = .24, p = .01$ ), raters who achieved a high level of accuracy for these target pairs are likely to be reliable (i.e., consistently make accurate ratings). The relationship between target one and target three was not statistically significant ( $r = .18, p = .07$ ).

**5.4.5. FORT effect on overall DIM profile rating accuracy.**  $H_3$  stated that the experimental group would make more accurate ratings of targets' overall DIM profile than the control group.  $H_3$  was tested in two ways (i.e., Cronbach's (1955) DA and Borman's (1977) differential accuracy scores were both used to perform two respective independent samples t-tests). DA was chosen above Cronbach's (1955) other accuracy components because it is the most conceptually similar to Borman's (1977) correlational accuracy (Powell, 2007). It was found that both accuracy operationalisations yield similar results.

**Hypothesis 3: Cronbach's DA.** On average, participants in the control group ( $M = .81$ ,  $SD = .22$ ) were more accurate at rating targets' overall DIM profile than the experimental group ( $M = .88$ ,  $SD = .22$ ). However, this difference was not statistically significant ( $t_{107} = -1.80$ ,  $p = .07$ ,  $CI [-.16, .01]$ ). See boxplot depicting results in Figure 5. It is concluded that both the control and experimental groups were equally inaccurate because higher values are indicative of lower accuracy scores.  $H_{3Cronbach}$  had a small effect size ( $d = .35$ ), and power = .95. In conclusion, when using Cronbach's (1955) DA,  $H_{3Cronbach}$  was rejected and  $H_0$  was accepted.

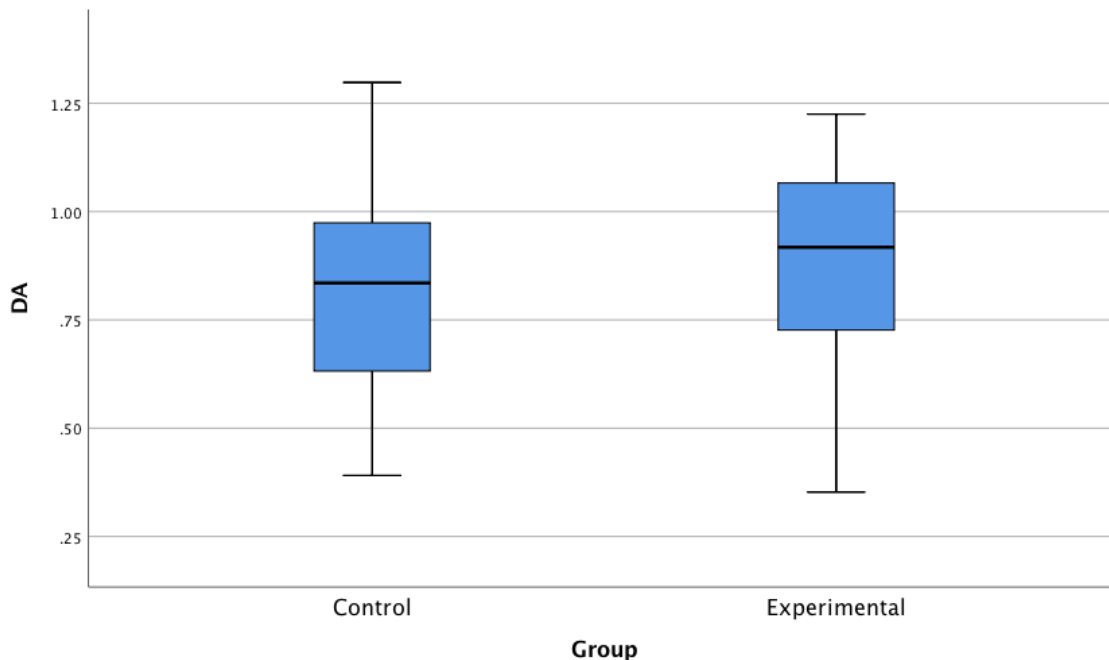


Figure 5. Boxplot depicting the difference between group means on Cronbach's (1955) differential accuracy.

**Hypothesis 3: Borman’s differential accuracy.** On average, the control group ( $M = .58$ ,  $SD = .41$ ) was more accurate at rating targets’ overall DIM profile than the experimental group ( $M = .53$ ,  $SD = .33$ ). However, this difference was not statistically significant ( $t_{107} = .79$ ,  $p = .43$ ,  $CI [-.08, .20]$ ). See boxplot depicting results in Figure 6. When using Borman’s (1977) differential accuracy, lower scores are indicative of inaccuracy. It is therefore concluded that both groups are inaccurate.  $H_{3\text{Borman}}$  had an effect size smaller than typical ( $d = .15$ ), and power = .95. When using Borman’s (1977) differential accuracy,  $H_{3\text{Borman}}$  was rejected and  $H_0$  was accepted. Therefore, the same decision was made when using both Cronbach’s (1955) DA and Borman’s (1977) differential accuracy.

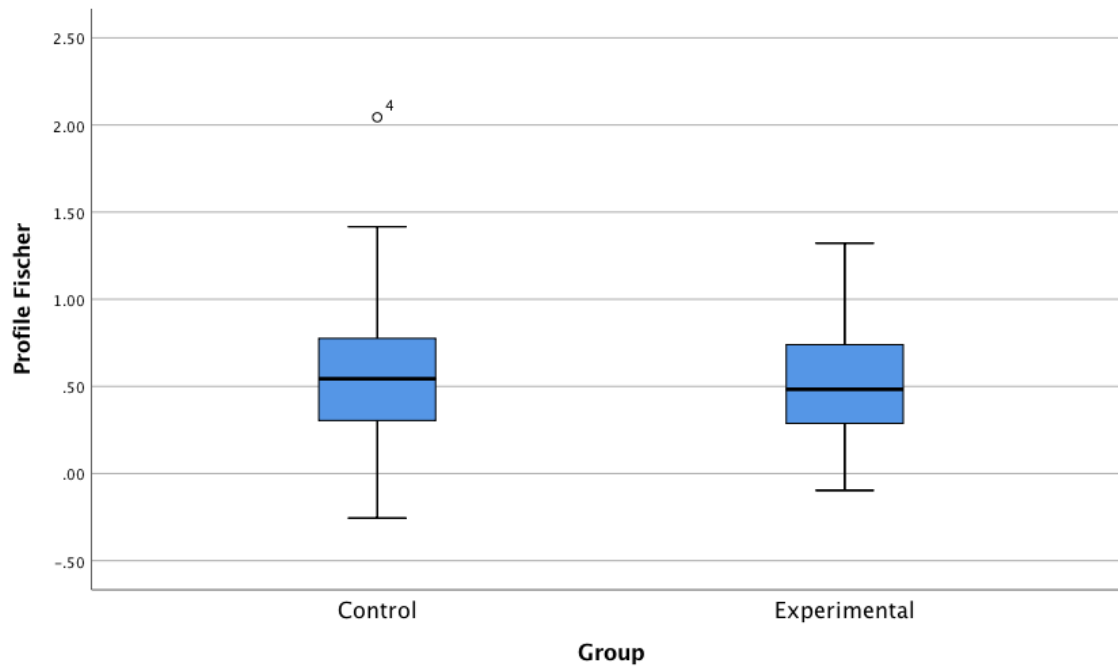


Figure 6. Boxplot depicting the difference between group means on Borman’s (1977) differential accuracy, with participant number 4 being an outlier in the control group.

**5.4.6. Relationships between accuracy criteria.**  $H_{4a} - 4c$  tested the relationship between DIM cue detection, DIM cue utilisation, and overall DIM profile rating accuracy. See correlation matrices for all three hypotheses in Table S3.

**Hypothesis 4a.**  $H_{4a}$  predicted that there would be a positive relationship between DIM cue detection accuracy, DIM cue utilisation accuracy, and overall DIM profile rating accuracy.



This hypothesis was tested using data across the control and experimental groups. Results revealed that there was a non-significant positive relationship between DIM cue detection and DIM cue utilisation accuracy ( $\rho = .07, p = .44, N = 109$ ). A non-significant negative correlation was found between DIM cue detection and overall DIM profile rating accuracy ( $\rho = -.04, p = .70, N = 109$ ). The positive relationship between DIM cue utilisation and overall DIM profile ratings accuracy was not statistically significant ( $\rho = .18, p = .06, N = 109$ ). It is concluded that there was no relationship between any of the three variables. Therefore, the decision was made to reject Hypothesis 4a and accept  $H_0$ .

**Hypothesis 4b and 4c.**  $H_{4b}$  and  $H_{4c}$  stated that there would be a positive relationship between DIM cue detection accuracy, DIM cue utilisation accuracy, and overall DIM profile rating accuracy in the control and experimental groups respectively. There was a non-statistically significant relationship between the variables in both groups. That is, there was a non-significant positive relationship between DIM cue detection and DIM cue utilisation accuracy in the control group ( $\rho = .15, p = .28, n = 53$ ) and experimental group ( $\rho = .01, p = .92, n = 56$ ). There was a non-significant negative relationship between DIM cue detection and overall DIM profile rating accuracy in the control group ( $\rho = -.07, p = .64, n = 53$ ). In contrast, the experimental group had a non-significant positive relationship between DIM cue detection and overall profile rating accuracy ( $\rho = .07, p = .61, n = 56$ ). A non-significant positive relationship was also seen between DIM cue utilisation and overall DIM profile ratings accuracy in the control group ( $\rho = .23, p = .11, n = 53$ ) and experimental group ( $\rho = .17, p = .20, n = 56$ ).  $H_{4b}$  and  $H_{4c}$  were rejected and  $H_0$  was accepted in both cases. It is concluded that there is no relationship between accuracy criteria.

**5.4.7. 'Good trait' hypotheses.** According to Funder's (1995) RAM, rating accuracy is moderated by four variables.  $H_{5a} - 5c$  pertain to Funder's (1995) moderator of the 'good trait'. Hypotheses were tested with a non-parametric Mann-Whitney U test using Borman's (1977) differential accuracy scores.

**Hypothesis 5a.**  $H_{5a}$  hypothesised that the experimental group would make more accurate ratings about the degree to which targets engaged in deceptive image creation (i.e., tactic/trait) than the control group. There was a non-statistically significant difference in deceptive image creation rating accuracy between the experimental group ( $Mdn = .31$ ) and control group ( $Mdn = .22$ ),  $U = 1265.50, z = -1.33, p = .18, M = .09, CI [-.15, .33]$ . Small median values show that both

groups were inaccurate at rating candidates' deceptive image creation.  $H_{5a}$  had a small effect size ( $d = .33$ ), and power = .95. Based on the results,  $H_{5a}$  was rejected and  $H_0$  was accepted.

**Hypothesis 5b.**  $H_{5b}$  proposed that, at the trait-level, the experimental group would be more accurate at rating the degree to which targets engaged in deceptive ingratiation than the control group. The experimental group ( $Mdn = .61$ ) was not statistically significantly better at rating targets' deceptive ingratiation than the control group ( $Mdn = .75$ ),  $U = 1227.50$ ,  $z = -1.59$ ,  $p = .11$ ,  $M = .77$ , CI [.63, .91]. Rather, the control group was non-statistically significantly more accurate than the experimental group, as seen in the control group's higher median value.  $H_{5b}$  had an effect size smaller than typical ( $d = .19$ ), and power = .95.  $H_0$  was accepted and  $H_{5b}$  was rejected.

**Hypothesis 5c.**  $H_{5c}$  claimed that the experimental group would make more accurate ratings about the degree to which targets engaged in deceptive image protection than the control group. There was no statistically significant difference between the experimental group ( $Mdn = 1.05$ ) and the control group ( $Mdn = 1.67$ ) when rating the degree to which targets engaged in deceptive image protection  $U = 1308.50$ ,  $z = -1.08$ ,  $p = .28$ ,  $M = 1.62$ , CI [1.33, 1.91]. Due to the small median value in both groups, it is concluded they were equally inaccurate.  $H_{5c}$  had a small effect size ( $d = .20$ ), and power = .95.  $H_{5c}$  was rejected and  $H_0$  was accepted. In conclusion, participants were equally accurate at rating all three types of DIM tactics (i.e., traits). One trait was not 'better' than the other traits.

**5.4.8. 'Good target' hypotheses.**  $H_{6a} - 6c$  tested Funder's (1995) moderator of rating accuracy known as the 'good target'. When testing hypotheses, Borman's (1977) differential accuracy scores were used to perform non-parametric Mann-Whitney U tests. Analyses were run per target.

**Hypothesis 6a.**  $H_{6a}$  predicted that the experimental group would rate Target 1 more accurately than the control group. The experimental group ( $Mdn = 1.71$ ) was slightly more accurate than the control group ( $Mdn = 1.66$ ). However, this difference was not statistically significant,  $U = 1206.50$ ,  $z = -1.70$ ,  $p = .09$ ,  $M = 1.76$ , CI [1.53, 1.99]. As seen in the low median values (i.e.,  $Mdn < 1.73$ ), it is concluded both groups rated Target 1 inaccurately.  $H_{6a}$  had a small effect size ( $d = .33$ ), and power = .95. Therefore, the decision was made to reject  $H_{6a}$  and accept  $H_0$ .

**Hypothesis 6b.**  $H_{6b}$  claimed that Target 2 would be rated more accurately by the experimental group than the control group. The experimental group ( $Mdn = 1.70$ ) and control group ( $Mdn = 1.70$ ) rated Target 2 with the same degree of accuracy. Therefore, there was no statistically significant difference between groups,  $U = 1369.00$   $z = -.70$ ,  $p = .48$ ,  $M = 1.79$ ,  $M = 1.79$ ,  $CI [1.55, 2.03]$ . Both groups were inaccurate at rating Target 2, as seen in the small median values.  $H_{6b}$  had an effect size smaller than typical ( $d = .11$ ), and power = .95.  $H_0$  was accepted and  $H_{6b}$  was rejected.

**Hypothesis 6c.**  $H_{6c}$  hypothesised that the experimental group would rate Target 3 more accurately than the control group. Findings revealed that the control group ( $Mdn = 1.19$ ) rated Target 3 more accurately than the experimental group ( $Mdn = 1.14$ ). However, the difference between groups was not statically significant,  $U = 1370.50$   $z = -.70$ ,  $p = .49$ ,  $M = 1.29$ ,  $CI [.99, 1.57]$ . Both groups were equally inaccurate (i.e., low median values depict inaccuracy).  $H_{6c}$  had a small effect size ( $d = .10$ ), and power = .95.  $H_{6c}$  was rejected and  $H_0$  was accepted. Overall, participants did not rate one target more accurately than other targets.

## Chapter 6: Discussion

### 6.1. General Discussion

The present study had two main aims: Firstly, it aimed to determine whether raters can be trained to accurately rate candidates' Deceptive Impression Management (DIM) using FORT. Secondly, it aimed to measure the effect of FORT on raters' accuracy against each stage of Funder's (1995) RAM independently. The first aim is practically important: successful FORT can be administered in organisations to real-life interviewers as a means to counteract the detrimental influence of DIM on interview performance evaluations. This could improve the validity of employment interviews and hiring decisions. The second aim is theoretically relevant to current academic knowledge on rating accuracy: measuring the multiplicative stages of RAM individually highlights the underlying mechanisms that both help and hinder overall rating accuracy. This answers De Kock et al.'s (2018) recommendation that future researchers should decompose behavioural accuracy measures into parts.

In summary, it was found that FORT participants were more accurate at detecting DIM cues than those who did not receive training. FORT had no effect on participants' DIM cue utilisation and/or overall DIM profile rating accuracy. The control and experimental groups were equally accurate at utilising DIM cues, and equally inaccurate at rating targets' overall DIM profiles. Past research found that FORT has an effect size of .50 (Roch et al., 2012). The present FORT intervention had a larger effect on DIM cue detection than typical, with an effect lower than typical on DIM cue utilisation and overall DIM profile accuracy. No relationship was found between the stages of RAM in either the control or experimental group. This supports the multiplicative nature of RAM: there was a 'zero' score on overall DIM profile rating accuracy (i.e., both groups were inaccurate), necessitating a null relationship between DIM cue detection, utilisation, and overall profile rating accuracy (Funder, 1995). Specific DIM traits and/or targets were not rated more accurately than others. The following chapter discusses the possible reason(s) behind these summarised findings. Funder's (1995) moderators of rating accuracy are used as a framework to guide the discussion.

The FORT intervention improved DIM cue detection accuracy, as seen in the experimental group's overall performance and large effect size. This finding suggests that cue detection is a learned skill which can be improved with training. DIM cue detection is likened to

an individual difference characteristic called behaviour observation ability, defined as: “the ability to detect behavioural cues as soon as they are emitted” (De Kock et al., 2018, p. 13). During the FORT’s ‘example task’ and ‘practice task’, experimental participants were taught to immediately state the DIM cues they detected. Because the experimental group was more accurate at DIM cue detection than the control group, it is possible that FORT improved experimental participants’ behavioural observation ability. Improved behavioural observation ability is important because it determines raters’ encoding, storage, and recall of ‘good information’ for future cue utilisation (De Kock et al., 2018).

The experimental group detected a greater number of DIM cues in total, had a higher hit-rate (i.e., true positive rate), and scored better on negative marking. Interestingly, experimental participants had a higher false-alarm rate (i.e., false positive rate) than control participants. This finding is in keeping with Sulsky and Day (1992) who found that FORT participants falsely rated behaviours that were present during training, not assessment. Because similar results were found by different researchers using the same training method, it is possible that the experimental groups’ high false-alarm rate is tied to the type of training implemented, rather than the trainability of DIM cue detection accuracy. To further understand the reason for this finding, future research should investigate the effect of different training methods on DIM cue detection accuracy, with specific attention to trainees’ false-alarm rate.

In contrast to DIM cue detection accuracy, the FORT intervention had no effect on participants’ DIM cue utilisation accuracy. Although there was no difference in the accuracy with which control and experimental groups utilised DIM cues, both groups made highly accurate ratings (i.e., participants’ median scores matched median true scores). Two moderating variables, known as the ‘good judge’ and ‘good information’ are arguably responsible for the null effect of the FORT intervention on participants’ DIM cue utilisation accuracy (Funder, 1995).

**6.1.1. Good judges.** The ‘good judge’ is an individual difference characteristic which moderates the stages in RAM (Funder, 1995). In this study, the ‘good judge’ might be a common characteristic across participants, rather than an individual difference characteristic (i.e., despite being randomly assigned, it is possible that all participants in the homogenous sample had this characteristic). Of relevance to this study is judges’ ‘cognitive ability’ (i.e., intelligence). It is assumed that, being university students, all participants had higher cognitive abilities than the

general population. This assumption is supported by De Kock et al. (2017) who found that psychology students from two different South African universities substantially outperformed managers on a dispositional reasoning measure. Dispositional reasoning ability is a specific type of intelligence, which is positively related to cognitive ability. Dispositional reasoning ability refers to raters' understanding of the relationships between traits and behaviours, and is known to predict rating accuracy (De Kock et al., 2015). Therefore, assuming that participants had high cognitive abilities and correspondingly high dispositional reasoning abilities, both experimental and control participants might have utilised their pre-existing understanding of the relationships between traits and behaviours to accurately match each DIM cue and corresponding DIM tactic during the DIM cue utilisation task (De Kock et al., 2017). In keeping with floor and ceiling effects which restrict the range of gathered data, FORT might have brought those individuals with 'lower' dispositional reasoning abilities up to speed with higher functioning individuals. This is common in educational research conducted with 'gifted' populations (i.e., participants with cognitive abilities in the upper range) (McBee, 2010). Training likely did not have an effect on higher functioning individuals, making all participants function at an 'average' level, cancelling out the possible effect of training on DIM cue utilisation rating accuracy (McBee, 2010).

**6.1.2. Good information.** The possible moderating effect of the 'good judge' might have been exacerbated by a second moderator, 'good information' (Funder, 1995). The text-based stimulus in the DIM cue utilisation task is arguably 'good' because both quality and quantity information were present (i.e., all necessary information was provided clearly), without being cognitively overloading. Information was only provided about the cue(s) and trait(s) of interest. Cues were not hidden behind overt job-dimensions, and no additional job-related information was provided, lightening participants' cognitive loads. Melchers, Kleinmann, and Prinz (2010) suggest that raters might make inaccurate ratings when their cognitive loads are too high.

Of great interest are the results tied to the third sub-test (i.e., the overall DIM profile rating accuracy task). FORT had no effect on raters' overall DIM profile rating accuracy (i.e., control and experimental groups rated targets' overall DIM profiles, specific traits, and specific targets with the same degree of accuracy). It is concerning that both groups made equally inaccurate ratings, as seen in low mean and median scores (Borman, 1977). Powell (2007) explains that, to fully understand why participants made inaccurate overall DIM profile ratings,

the researcher should determine which cues were detected and utilised. That is beyond the scope of this study. Rather, (in)accurate DIM cue detection and DIM cue utilisation are implied in the accuracy of participants' overall DIM profile ratings, making this sub-test the most true to real-life. The following possible reasons for participants' inaccuracy are suggested.

**6.1.3. Information quantity and quality.** The information in the overall DIM profile rating task was designed to be 'good', replicating real-life employment interviews. Unlike the 'good' text-based information that facilitated accurate DIM cue utilisation, the realistic information in the overall DIM profile rating task might have overloaded participants, hindering accuracy. Participants' inability to accurately rate realistic stimuli suggests that real-life deception is difficult to judge in employment interviews, in keeping with Bond and DePaulo (2006). As explained by Funder (1995), rating accuracy is moderated by the quantity and quality of the information made available to the judge. The information in the third sub-test might have hindered accuracy because the breadth and depth of information was simultaneously too low and too high (i.e., there was both too little and too much quality information).

***Too little information?*** Both groups might have rated the targets' overall DIM profiles inaccurately due to their relatively short exposure to the targets (i.e., participants did not have sufficient information to make accurate ratings). Each of the three video-recorded mock employment interviews in the third sub-test were approximately five minutes long. As per the 'acquaintanceship effect', raters are more likely to make accurate ratings when they are familiar with the target because the number of relevant cues made available increases over time (i.e., the rater is exposed to a large amount of information pertaining to the ratee's thoughts, attitudes, feelings, and behaviours over a long period) (Connolly, Kavanagh, & Viswesvaran, 2007). It is possible that the short length of the stimuli was a downfall of this study. To justify this, it is argued that the video-recorded mock employment interviews were purposely kept short to reduce rater's cognitive loads and facilitate accurate ratings (Pieterse, 2016). Interviewers' cognitive load increases significantly over a long period of time because more information is gathered and processed (Buller & Burgoon, 1996). Cognitively overloaded raters make inaccurate ratings. Acquainting raters and targets would have been impractical and unrealistic in this study because candidates and interviewers are typically unfamiliar in real-life interviews (Powell, 2007; Powell & Bourdage, 2016).

It is also possible that the participants had too little information to make accurate ratings because they did not gather the relevant and available information themselves (Powell, 2007). In real-life employment interviews, 'good judges' make accurate ratings by eliciting good information through building rapport and asking probing/ searching questions (De Kock et al., 2018). In this case, the participants were passive observers with no control over the relevant and available information.

***Too much high quality information?*** In addition to there being too little information, it is also argued that there might have simultaneously been too much high quality information in the third sub-test. This could have contributed to participants' information and cognitive overload, resulting in inaccurate ratings (Melchers et al., 2010). In comparison to the text-based second sub-test, the audio-visual information in the third sub-test was very rich. Differing degrees of information 'richness' could account for both groups' accuracy and inaccuracy in sub-tests two and three respectively.

During the third sub-test, both relevant and irrelevant auditory as well as visual cues were made available through targets' verbal and non-verbal behaviours as well as their narratives/discourses. The need to process this information in real-time might have cognitively overloaded participants when compared to the text-based cues in the second-sub test. The inclusion of relevant and irrelevant information required participants to distinguish between honest and deceptive cues. Cues were also obscured behind the overt interview dimensions explicitly asked by the interviewer in the scripted interview questions. In line with Signal Detection theory, it is possible that there was too much noise (i.e., irrelevant information in the form of overt job dimensions and/or irrelevant cues) coupled with a weak signal (i.e., the meaningful and relevant DIM cues were not easily available to the participants). The high noise to signal ratio resulted in inaccurate ratings (Lord, 1985). In addition, each video-recorded mock employment interview pertained to a different type of job, increasing the difficulty of the task. This stands in contrast to the second sub-test in which all DIM cues were provided (i.e., the need to detect cues and distinguish between honest and deceptive cues was removed), the items were not hidden behind job-related information, and the items were not tailored to specific jobs. The above explanation is in keeping with meta-analyses on Lens Theory which reveal that accuracy is lower when: (a) there are more available cues, and (b) when judges detect their own relevant cues vs. when judges are given the relevant cues (Letzring & Funder, 2016).



Finally, as per the multiplicative nature of RAM, experimental participants should have rated targets’ overall DIM profiles accurately because this group was accurate on both the DIM cue detection and DIM cue utilisation tasks (Funder, 1995). It is possible that participants in both groups did not make accurate overall DIM profile ratings because the stages of RAM were not measured independently. It might be easier to make accurate ratings when the process is divided into stages which simplifies the rating process, as seen in the experimental groups’ accuracy in the DIM cue detection and DIM cue utilisation tasks. It is possible that real-life interviewers do not rate candidate’s DIM accurately because combining all of RAM’s stages in one step makes the rating process too complex.

The above points explain why too much quality information might have caused participants to make inaccurate ratings, regardless of their group allocation. It is possible that the FORT did not have an effect on experimental participants’ rating accuracy because the assessment was conducted immediately after training. The experimental group held knowledge of DIM in their working memory, exacerbating their cognitive load and hindering their ability to accurately detect and utilise DIM cues. An exacerbated cognitive load could have nullified the effect of training on experimental participants’ overall DIM rating accuracy, resulting in equivalent ratings between the groups (Powell & Bourdage, 2016).

**6.1.4. The role of FORT in study findings.** FORT aims to replace maladaptive cognitive frameworks with adaptive schemas. It is possible that schema theory <sup>5</sup>(i.e., the theoretical basis underpinning FORT) underlies the intervention’s failure to improve participants’ overall DIM profile rating accuracy.

Deceptive schemas as used in everyday interpersonal interactions (Hall, 2015). It is therefore possible that participants were ‘experts’ at rating others’ faking in everyday social situations, not employment interviews (i.e., prior to the study, participants had regular opportunities to refine their real-life deceptive schemas). If deceptive cues were the same across everyday interpersonal interactions and employment interviews, the intervention might have been too simplistic to train participants functioning at expert-level. FORT aims to take novice raters and train them to be ‘experts’ (Hall, 2015). Expert raters are more likely to resist changing

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<sup>5</sup> According to schema theory, schemas (i.e., cognitive patterns) are developed and fine-tuned over the course of an individual’s life based on their experiences. During person perception processes (e.g., rating deception), schemas are employed to reduce individual’s cognitive loads, allowing them to make judgements/ratings quickly.

their pre-existing cognitive schemas than novice raters (Crocker, Fiske & Taylor, 1984; Rousseau, 2001). It is therefore possible that the experimental group did not adopt the normative deceptive schemas pertaining to deception in employment interviews introduced during FORT because they might have incorrectly perceived themselves as 'experts' across all person perception domains based on their life experiences. The effect of training so-called 'expert-level' individuals may therefore possibly be redundant, as seen in the control and experimental groups' equivalent performance on the DIM cue utilization and overall DIM profile rating tasks. Resistance to changing one's entrenched schemas is known as 'cognitive inertia' (Reger, Gustafson, Demarie, & Mullane, 1994). Change resistance is an important characteristic of schemas which are meant to be stable (i.e., not easily malleable/ changeable). Schemas exist to reduce cognitive effort. Constantly changing schemas would be highly cognitively demanding and effortful (Labianca, Gray, & Brass, 2000; Larson, 1994). This is not to say that pre-existing schemas are unchangeable. Schemas can change over time if the change is implemented correctly (i.e., if change is attractive, positive, and gradual) (Balogun & Johnson, 2004; Rousseau, 2001).

The design and implementation of the FORT intervention might have hindered the experimental group's schema change, resulting in their schemas remaining unaffected. Random assignment ensured that the experimental and control groups had the same pre-existing deceptive schemas. Because the experimental groups' schemas likely remained unchanged, it is possible that both groups used the same maladaptive information processing strategies to rate candidates' overall profiles. Evidence to support this is seen in the both groups' equally inaccurate overall DIM profile ratings. The design and implementation of the FORT intervention could have hindered schema change in the following ways:

Firstly, schema change was not communicated in a change-orientated manner. Individuals are less likely to adopt change when the need for and/or reason behind the change is not openly communicated in an attractive way (Hall, 2015; Rousseau, 2001). Although the need for DIM rating accuracy was expressed, the reason behind participants' own schema change was not openly communicated because the study contained deception (i.e., control and experimental participants were only made aware of the study's true purpose during debriefing). Hence, it is possible that experimental participants did not adopt the schema change because the researcher was not fully transparent about their need to do so.

Secondly, participants might not have been motivated to change their cognitive schemas. Motivation is defined by the goals or objectives that drive raters' rating behaviors (De Kock et al., 2018; Harris, 1994). Schema change is cognitively demanding. Individuals will only expend the required cognitive effort if they are motivated to do so by intrinsic and/or extrinsic rewards (Labianca et al., 2000; Rousseau, 2001). Although participants were offered a financial research participation incentive for participating, they were aware that they would receive the incentive regardless of their performance on the assessment. It is therefore possible that experimental participants unconsciously dismissed the training because they were not motivated and/or rewarded (Hall, 2015). RAM explains that motivated raters are more likely to rate accurately (Funder, 1999). If the true purpose of the study had been communicated to the experimental participants at the start of the study, it is possible that they might have been intrinsically motivated to out-perform the control group by adopting the new cognitive schemas communicated to them. However, openly divulging the purpose of this study would have introduced bias into the study.

Thirdly, the schema change process was not gradual. Because the 60-minute long training intervention was short in comparison to other FORT studies (e.g., Lievens' (2001) FORT which took a day), it is likely that the schema change process was not gradual enough. Sudden schema-changes, such as those required in this study, are somewhat unlikely (Hall, 2015; Larson, 1994; Rousseau, 2001). It is also possible that the combined training and assessment might have been too long, resulting in boredom and fatigue among the experimental participants. Due to their boredom and fatigue, it is possible that the experimental group did not answer the third sub-test to the best of their ability, neutralising the potential effect of the FORT on their rating accuracy.

In contrast to the above possible reasons why the experimental group did not change their schemas, it is possible that they incorrectly changed their schemas. The application of incorrect schemas would have resulted in inaccurate ratings (Labianca et al., 2000; Rousseau, 2001). It is possible that an 'error of omission' occurred whereby participants' pre-existing deceptive schemas were not included in the normative schemas communicated during FORT. Schema change resistance makes it is easier to add to pre-existing schemas than remove them, known as: the 'perseverance effect' (Ross, Lepper, & Hubbard, 1975). Participants might have included their pre-existing deceptive schemas with the FORT's normative schemas; called 'error of commission' (Hall, 2015; Spranca, Minsk, & Baron, 1991; Uggerslev & Sulsky, 2008).

Furthermore, participants might have only taken information from the FORT programme that supported/confirmed their pre-existing beliefs (Rousseau, 2001).

## 6.2. Limitations

This research study had several limitations. Limitations are grouped as either (a) design-related, (b) stimulus/target-related, or (c) sample-related:

**6.2.1. Design-related.** The laboratory true experimental design did not fully replicate real-life. Being passive observers, not interviewers, participants were unable to gather relevant information themselves. This limited the 'goodness' of available information, potentially hindering rating accuracy. The study was also limited to measuring participants' ability to detect and use available information, not their ability to gather relevant information (Powell, 2007). Despite these limitations, using video-recorded mock employment interviews allowed the researcher to hold the training and assessment material constant: decreasing the threat of confounding/third variables and increasing the future replicability of the study. The post-test only design could not measure the influence of time on FORT outcomes. Although the single administration of FORT was in keeping with protocol as well as the time and financial restraints of this study, it did not facilitate gradual schema change (Hall, 2015).

**6.2.2. Stimulus/target related.** DIM cues (e.g., maintaining eye contact as a cue for deceptive ingratiation) in the training and assessment materials were based on research findings from studies conducted in western cultures (Powell, 2007; Schneider et al., 2015). As seen in the descriptive statistics, the sample was diverse with the majority of participants identifying as African. It is not known whether the DIM cues in western cultures align with those in non-western cultures. If there is no alignment, the likelihood of DIM rating accuracy might have been hindered. The ecological validity of DIM cues in non-western cultures should have been investigated before conducting this study (Powell, 2007).

**6.2.3. Sample-related.** The generalisability of findings to non-student populations in organisational settings is often questioned. Using student participants is justified in the following ways: Firstly, Reinhard et al., (2013) as well as Roulin et al., (2015) have shown that DIM rating

accuracy does not increase/decrease based on the rater's experience. Therefore, inexperienced student participants are likely to yield the same results as professional interviewers. Secondly, studies (e.g., Christiansen et al., 2005; De Kock et al., 2015; Letzring, 2008; Mast, Bangerter, Bulliard, & Aerni, 2011; Powell & Goffin, 2009), have shown that students can make accurate personality judgements. The same is likely true for DIM judgements.

It is possible that participants only took part to receive the financial research participation incentive. Being financially motivated, rather than intrinsically motivated, participants might not have given their best effort during training and assessment. In response to this limitation, it is argued that offering an incentive made this study more generalizable because professional interviewers are paid for their time and accuracy (Powell, 2007).

### **6.3. Directions for Future Research**

It is suggested that future researchers conduct field experiments where training and assessment takes place in real-life organisations with professional interviewers as participants (Powell, 2007).

Researchers wanting to repeat this study could add to current findings by also sampling from more diverse populations (i.e., not a relatively homogenous student population), while also possibly comparing and contrasting the findings between different populations. This would reduce the likelihood of floor and ceiling effects (McBee, 2010). An example is seen in the study by De Kock et al. (2017) whereby comparisons are drawn between students' and managers' dispositional reasoning.

Future research should also determine the effect of time on DIM rating accuracy post-FORT, as well as the effect on raters' behavioural memory ability.

Because the FORT intervention had no effect on raters' DIM cue utilisation or overall DIM profile rating accuracy, future research should determine the effect of other training methods on these outcomes (e.g., schema- feedback training, as suggested by Hall, 2015).

When measuring the stages of RAM independently, future researchers should use the same type of stimuli across sub-tests (e.g., the text-based task in the second sub-test could be replaced by an audio-visual-based task that measures DIM cue utilisation accuracy, in keeping with the other tasks). This will prevent the moderator of 'good information' from influencing rater accuracy differently across tasks.

It is also recommended that future researchers include the stage 'cue elicitation' to train and measure raters' ability to gather their own relevant and available information (De Kock et al., 2018).

#### **6.4. Implications for Theory**

The current study furthers academic knowledge by seeking support for Funder's (1995) RAM in the context of DIM as well as disentangling RAM. This is achieved by measuring each stage of RAM independently. Disentanglement sheds light on the underlying mechanisms behind the process of (in)accurate ratings, while indicating which stage(s) training should be targeted at. From the derived results, it is suggested that training should be targeted at improving DIM cue detection accuracy, with emphasis on improving raters' behaviour observation ability.

The present study adds to existing literature on FORT. To the knowledge of the researcher and research supervisor, this is the first study to determine the effect of FORT on DIM rating accuracy.

This study expands on past research by being the first to indirectly looking at dispositional reasoning schemas for a new construct (i.e., schemas pertaining to DIM, not the Big Five Personality Traits). Past studies have focused on the influence of raters' dispositional reasoning schemas on accurate personality judgement (e.g., Christiansen et al., 2005; Powell & Goffin, 2009). Investigating a new dispositional reasoning schema is in keeping with the recommendation for future research by De Kock et al. (2017).

#### **6.5. Practical Implications**

It is concluded that the FORT intervention improves raters' behavioural observation ability, because the experimental group outperformed the control group in this sub-test on the DIM cue detection task. This is practically relevant when training novice recruiters. Mast et al. (2011) found that improving students' rating accuracy makes their accuracy similar to that of professional recruiters. Students, like novice recruiters, typically do not have interviewing experience. Organisations could therefore use this FORT intervention when training novice recruiters to detect candidates' DIM, quickly raising their proficiency to that of their experienced counterparts (Powell & Bourdage, 2016).

The assessment (i.e., the three sub-tests pertaining to DIM cue detection, utilisation, and overall profile rating accuracy respectively) developed for this study could be practically relevant when screening interviewers: only those interviewers who are accurate on all three tasks should be hired.

The video-recorded mock employment interviews, as well as the training and assessment tools, are relevant to future researchers who wish to either replicate this study in different contexts and populations or expand on this study.

## Chapter 7: Conclusion

The present study had two main aims. Firstly, to determine the trainability of DIM rating accuracy using FORT. Secondly, it aimed to determine the effect of FORT on rating accuracy by disentangling Funder's (1995) RAM and measuring each stage independently.

A post-test only true experimental design was implemented in which the experimental group received FORT, but the control group did not. Both groups completed the same computerised assessment package which included three subtests (i.e., as per RAM, there was a DIM cue detection task, DIM cue utilisation task, and overall DIM profile rating task). Results showed that FORT improved participants' DIM cue detection accuracy, suggesting that behaviour observation ability is a skill that can be learned. This result speaks directly to the trainability of DIM rating accuracy: when training interviewers to accurately rate candidates' DIM, focus should be on RAM's cue detection stage. FORT had no effect on DIM cue utilisation and/or overall DIM profile ratings. The control and experimental group utilised DIM cues with the same degree of accuracy. Both groups were equally inaccurate at rating targets' overall DIM profiles. In support of the multiplicative nature of RAM, there was no relationship between the stages of RAM. Participants did not rate specific traits and/or targets more accurately than others. Results are attributed to two of RAM's moderators (i.e., the 'good judge' and 'good information') as well as the design and implementation of the FORT intervention itself.

Despite several design, stimulus, and sample-related limitations, the present study has important implications for theory and practice, while suggesting future research directions. To the knowledge of the researcher and research supervisor, this is the first study to: (1) determine the trainability of DIM using FORT; (2) to disentangle and independently measure the stages of RAM; (3) investigate new dispositional reasoning schemas pertaining to DIM. The findings of this study support the claim that rating faking is an extremely difficult task, making accurate ratings unlikely (Bond & DePaulo, 2006).



### References

- Adams, H. F. (1927). The good judge of personality. *Journal of Abnormal and Social Psychology*, 22(2), 172 - 181.
- Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, 17(4), 351 – 371.
- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods*, 16(2), 270 - 301.
- Allik, J. (2017). The unbearable lightness of personality. *Journal of Personality*, 86(1), 109 – 123.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York, NY: Holt, Rinehart & Winston.
- American Psychological Association (2017, January 1). Ethical Principles of Psychologists and Code of Conduct: Including 2010 and 2016 Amendments. [Online Legislation]. Retrieved from: <http://www.apa.org/ethics/code/>
- Athey, T. R., & McIntyre, R. M. (1987). Effect of rater training on rater accuracy: Levels-of-processing theory and social facilitation theory perspectives. *Journal of Applied Psychology*, 72(4), 567 – 572.
- Balogun, J., & Johnson, G. (2004). Organisational restructuring and middle manager sensemaking. *Academy of Management Journal*, 47(4), 523 - 549.
- Banks, C. G., & Murphy, K. R. (1985). Toward narrowing the research–practice gap in performance appraisal. *Personnel Psychology*, 38(2), 335 – 345.
- Bernardin, H. J., & Buckley, R. M. (1981). Strategies in rater training. *Academy of Management Review*, 6(2), 205 – 212.

- Bernardin, H. J., & Pence, E. C. (1980). Effects of rater training: Creating new response sets and decreasing accuracy. *Journal of Applied Psychology*, 65(1), 60 – 66.
- Biesanz, J. C., Human, L. J., Paquin, A., Chan, M., Parisotto, K. L., Sarracino, J., & Gillis, R. L. (2011). Do we know when our impressions of others are valid? Evidence for realistic accuracy awareness in first impressions of personality. *Social Psychological & Personality Science*, 2(5), 452 - 459.
- Blackman, M. C., & Funder, D. C. (1998). The effect of information on consensus and accuracy in personality judgment. *Journal of Experimental Social Psychology*, 34(2), 164 - 181.
- Bond, C. F., & DePaulo, B. M. (2006). Accuracy of deception judgments. *Personality and Social Psychology Review*, 10(3), 214–234.
- Borkenau, P., & Liebler, A. (1992). Trait inferences: Sources of validity at zero acquaintance. *Journal of Personality and Social Psychology*, 62(4), 645 – 657.
- Borkenau, P., & Liebler, A. (1995). Observable attributes as manifestations and cues of personality and intelligence. *Journal of Personality*, 63(1), 1 - 25.
- Borman, W. C. (1977). Consistency of rating accuracy and rating errors in the judgment of human performance. *Organizational Behaviour and Human Performance*, 20(2), 238 - 252.
- Bourdage, J. S., Roulin, N., & Levashina, J. (2017). Impression Management and Faking in Job Interviews. *Frontiers in Psychology*, 8, 1294.
- Bozeman, D. P., & Kacmar, K. M. (1997). A cybernetic model of impression management processes in organisations. *Organisational Behaviour and Human Decision Processes*. 69(1), 9 – 30.
- Brunswik, E. (1955). Representative design and probabilistic theory in a functional psychology. *Psychological Review*, 62(3), 193 - 217.

- Brunswik, E. (1956). *Perception and the representative design of psychological experiments*. Berkeley: University of California Press.
- Buehl, A. K., & Melchers, K. G. (2017). Individual difference variables in the occurrence and effectiveness of faking behaviour in interviews. *Frontiers in Psychology*, 8, 686.
- Buller, D. B., & Burgoon, J. K. (1996). Interpersonal deception theory. *Communication Theory*, 6(3), 203 - 242.
- Campion, M.A., Palmer, D. K., & Campion, J.E. (1997). A review of structure in the selection interview. *Personnel Psychology*, 50(3), 655 – 702.
- Cardy, R. L., & Dobbins, G. H. (1994). *Performance appraisal: Alternative perspectives*. Cincinnati, OH: South-Western.
- Christiansen, N. D., Wolcott-Burnam, S., Janovics, J. E., Burns, G. N., & Quirk, S. W. (2005). The good judge revisited: Individual differences in the accuracy of personality judgments. *Human Performance*, 18(2), 123 – 149.
- Cline, V. B., Atzet, J., & Holmes, E. (1972). Assessing the validity of verbal and nonverbal cues in accurately judging others. *Comparative Group Studies*, 3(4), 383 - 394.
- Colman, D. E., Letzring, T. D., & Biesanz, J. C. (2016). Seeing and feeling your way to accurate personality judgments: The moderating role of perceiver empathic tendencies. *Manuscript submitted for publication*.
- Colvin, C. R. (1993). 'Judgable' people: Personality, behaviour, and competing explanations. *Journal of Personality and Social Psychology*, 64(5), 861 - 873.
- Connelly, B. S., & Ones, D. S. (2010). Another perspective on personality: Meta-analytic integration of observers' accuracy and predictive validity. *Psychological Bulletin*, 136(6), 1092 – 1122.

- Connolly, J. J., Kavanagh, E. J., & Viswesvaran, C. (2007). The convergent validity between self and observer ratings of personality: A meta-analytic review. *International Journal of Selection and Assessment*, 15(1), 110 – 117.
- Crano, W., & Brewer, M. B. (2002). *Principles and Methods of Social Research* (2<sup>nd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Cronbach, L. J. (1955). Processes affecting scores on 'understanding of others' and 'assumed similarity.' *Psychological Bulletin*, 52(3), 177 – 193.
- Cunningham, J. B., & McCrum-Gardner, E. (2007). Power, effect and sample size using GPower: practical issues for researchers and members of research ethics committees. *Evidence-Based Midwifery*, 5(4), 132 - 137.
- De Kock, F. S., Lievens, F., & Born, M, P. (2015). An in-depth look at dispositional reasoning and interviewer accuracy. *Human Performance*, 28(3), 199 – 221.
- De Kock, F. S., Lievens, F., & Born, M, P.(2018). The profile of the 'good judge' in HRM: A systematic review and agenda for future research. *Human Resource Management Review*, 1, 1 – 22.
- De Kock, F. S., Lievens, F., & Born, M. P. (2017). A closer look at the measurement of dispositional reasoning: Dimensionality and invariance across assessor groups. *International Journal of Selection and Assessment*, 25(3), 240 – 252.
- DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), 74 – 118.
- Ekman, P. (1992). *Telling lies*. New York: Norton.

- Ellis, A. P., West, B. J., Ryan, A. M., & DeShon, R. (2002). The use of impression management tactics in structured interviews: A function of question type? *Journal of Applied Psychology*, 87(6), 1200 – 1208.
- Estes, S. G. (1938). Judging personality from expressive behaviour. *The Journal of Abnormal and Social Psychology*, 33(2), 217 - 236.
- Feiler, A. R., & Powell, D. M. (2015). Behavioural expression of job interview anxiety. *Journal of Business and Psychology*, 31(1), 155 – 171.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4<sup>th</sup> ed.). London, UK: SAGE Publications Ltd.
- Funder, D. C. (1995). On the accuracy of personality judgement: A realistic approach. *Psychological Review*, 102(4), 652 – 670.
- Funder, D. C. (1999). *Personality judgement: A realistic approach to person perception*. San Diego, CA: Academic Press.
- Funder, D. C. (2012). Accurate personality judgment. *Current Directions in Psychological Science*, 21(3), 177 - 182.
- Funder, D. C., & Colvin, C. R. (1988). Friends and strangers: Acquaintanceship, agreement, and the accuracy of personality judgement. *Journal of Personality and Social Psychology*, 55(1), 773 – 794.
- Funder, D. C., & Dobroth, K. M. (1987). Differences between traits: Properties associated with interjudge agreement. *Journal of Personality and Social Psychology*, 52(2), 409 – 418.
- Gilmore, D. C., & Ferris, G. R. (1989). The effects of applicant impression management tactics on interviewer judgments. *Journal of Management*, 15(4), 557 – 564.

- Hall, J. (2015). *The effect of schema-based training on dispositional reasoning components: Comparing Frame of Reference training and schema-feedback training* (Master's dissertation). Cape Town: University of Cape Town.
- Hall, J. A., Andrzejewski, S. A., Murphy, N. A., Mast, M. S., & Feinstein, B. A. (2008). Accuracy of judging others' traits and states: Comparing mean levels across tests. *Journal of Research in Personality*, 42(6), 1476 - 1489.
- Hammond, K. R. (1955). Probabilistic functioning and the clinical method. *Psychological Review*, 62(4), 255 - 262.
- Hammond, K. R., Hursch, C. J., & Todd, F. J. (1964). Analyzing the components of clinical inference. *Psychological Review*, 71(6), 438 - 456.
- Harris, M. M. (1994). Rater motivation in the performance appraisal context: A theoretical framework. *Journal of Management*, 20(4), 737 – 756.
- Hartwig, M., & Bond Jr, C. F. (2014). Lie detection from multiple cues: A meta-analysis. *Applied Cognitive Psychology*, 28(5), 661 - 676.
- Hauenstein, N. M. A., & Foti, R. J. (1989). From laboratory to practice: Neglected issues in implementing Frame of Reference training. *Personnel Psychology*, 42(2), 359 – 378.
- Hauptfleisch, D. B. (2012). *The moderating effect of interview structure on race-group similarity effects in simulated interview ratings* (Masters dissertation). Stellenbosch University: Stellenbosch.
- Highhouse, S. (2009). Designing experiments that generalize. *Organisational Research Methods*, 12(3), 554 – 566.
- Huffcutt, A., & Culbertson, S. (2011). Interviews. In S. Zedeck (Ed.), *APA handbook of industrial and organisational psychology* (pp. 185–203). Washington, DC: American Psychological Association.

- Human, L. J., & Biesanz, J. C. (2013). Targeting the good target: An integrative review of the characteristics and consequences of being accurately perceived. *Personality and Social Psychology Review, 17*(3), 248 – 272.
- Ilgén, D. R., & Feldman, J. M. (1983). Performance appraisal: A process focus. *Research in Organisational Behaviour, 5*, 141 – 197.
- Jackson, D. N. (1972). A model for inferential accuracy. *Canadian Psychologist/Psychologie Canadienne, 13*(3), 185 – 195.
- Jain, A., Bansal, R., Kumar, A., & Singh, K. D. (2015). A comparative study of visual and auditory reaction times on the basis of gender and physical activity levels of medical first year students. *International Journal of Applied and Basic Medical Research, 5*(2), 124 - 127.
- Jansen, A., König, C. J., Stadelmann, E. H., & Kleinmann, M. (2012). Applicants' self-presentational behaviour: What do recruiters expect and what do they get? *Journal of Personnel Psychology, 11*(2), 77 – 85.
- Janz, T. (1982). Initial comparisons of patterned behaviour description interviews versus unstructured interviews. *Journal of Applied Psychology, 67*(5), 577 – 580.
- John, O., & Robins, R. W. (1993). Determinants of interjudge agreement on personality traits: The big five domains, observability, evaluativeness, and the unique perspective of the self. *Journal of Personality, 61*(4), 521 - 551.
- Kacmar, K. M., Delery, J. E., & Ferris, G. R. (1992). Differential Effectiveness of Applicant Impression Management Tactics on Employment Interview Decisions 1. *Journal of Applied Social Psychology, 22*(16), 1250 - 1272.
- Kirk, R. E. (2007). Experimental design. *The Blackwell Encyclopaedia of Sociology*.

- Kolar, D. W. (1996). *Individual differences in the ability to accurately judge the personality characteristics of others*. (Unpublished doctoral dissertation), University of California, Riverside, CA.
- Konig, C. J., Hafsteinsson, L. G., Jansen, A., & Stadelmann, E. H. (2011). Applicants' self-presentational behaviour across cultures: Less self-presentation in Switzerland and Iceland than in the United States. *International Journal of Selection and Assessment*, 19(4), 331 – 339.
- Kristof-Brown, A. L., Barrick, M. R., & Franke, M. (2002). Applicant impression management: Dispositional influences and consequences for recruiter perceptions of fit and similarity. *Journal of Management*, 28(1), 27 – 46.
- Labianca, G., Gray, B., & Brass, D. J. (2000). A grounded model of organisational schema change during empowerment. *Organisation Science*, 11(2), 235 - 257.
- Landy, F. J., & Farr, J. L. (1980). Performance rating. *Psychological Bulletin*, 87(1), 72 – 107.
- Larson, D. W. (1994). The role of belief systems and schemas in foreign policy decision making. *Political Psychology*, 15(1), 17 – 33.
- Latham, G., & Sue-Chan, C. (1999). A meta-analysis of the situational interview: An enumerative review of reasons for its validity. *Canadian Psychology*, 40(1), 56 – 67.
- Latham, G., Saari, L.M., Pursell, E.D., & Campion, M. A. (1980). The situational interview. *Journal of Applied Psychology*, 64, 422 – 427.
- Law, S. J., Bourdage, J., & O'Neil, T. A. (2016). To fake or not to fake: Antecedents to interview faking, warning instructions, and its impact on applicant reactions. *Frontiers in Psychology*, 7, 1771.
- Lee, K., & Ashton, M. C. (2006). Further assessment of the HEXACO personality inventory: Two new facet scales and an observer report form. *Psychological Assessment*, 18(2), 182 - 191.



- Leech, N., Barrett, K., & Morgan, G. (2011). *IMB SPSS for intermediate statistics, use and interpretation*. New York: Taylor and Francois Group.
- Letzring, T. D. (2008). The good judge of personality: Characteristics, behaviours, and observer accuracy. *Journal of Research in Personality*, 42(4), 1 – 19.
- Letzring, T. D., & Funder, D. C. (2016). *Interpersonal accuracy in trait judgements*. The SAGE Handbook of Personality and Individual Differences. Thousand Oaks, CA: Sage.
- Letzring, T. D., Wells, S., & Funder, D. C. (2006). Quantity and quality of available information affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology*, 91(1), 111 – 123.
- Levashina, J., & Campion, M. A. (2006). A model of faking likelihood in the employment interview. *International Journal of Selection and Assessment*, 14(4), 299 – 316.
- Levashina, J., & Campion, M. A. (2007). Measuring faking in the employment interview: Development and validation of an interview faking behaviour scale. *Journal of Applied Psychology*, 92(6), 1638 – 1656.
- Levashina, J., Hartwell, C.J., Morgeson, F., & Campion, M. A. (2014). The structured employment interview: Narrative and quantitative review of the research literature. *Personnel Psychology*, 67(1), 241 – 293.
- Lievens, F. (2001). Assessor training strategies and their effect on accuracy, interrater reliability, and discriminant validity. *Journal of Applied Psychology*, 86(2), 255 – 264.
- Lippa, R. A., & Dietz, J. K. (2000). The relation of gender, personality, and intelligence to judges' accuracy in judging strangers' personality from brief video segments. *Journal of Nonverbal Behaviour*, 24(1), 25 – 43.

- Lord, R. G. (1985). Accuracy in behavioural measurement: An alternative definition based on rater's cognitive schema and signal detection theory. *Journal of Applied Psychology*, 70(1), 66 – 71.
- Macan, T. H. (2009). The employment interview: A review of current studies and directions for future research. *Human Resource Management Review*, 19(3), 203 – 218.
- Mann, S., Vrij, A., & Bull, R. (2004). Detecting true lies: Police officers' ability to detect suspects' lies. *Journal of Applied Psychology*, 89(1), 137 – 149.
- Mast, M. S., Bangerter, A., Bulliard, C., & Aerni, G. (2011). How accurate are recruiters' first impressions of applicants in employment interviews? *International Journal of Selection and Assessment*, 19(2), 198 – 208.
- McBee, M. (2010). Modelling outcomes with floor or ceiling effects: An introduction to the Tobit model. *Gifted Child Quarterly*, 54(4), 314 - 320.
- McCarthy, J. M., & Goffin, R. D. (2004). Measuring job interview anxiety: Beyond weak knees and sweaty palms. *Personnel Psychology*, 57(3), 607 – 637.
- McFarland, L. A., Yun, G., Harold, C. M., Viera Jr, L., & Moore, L. G. (2005). An examination of impression management use and effectiveness across assessment centre exercises: The role of competency demands. *Personnel Psychology*, 58(4), 949 - 980.
- McIntyre, R. M., Smith, D. E., & Hassett, C. E. (1984). Accuracy of performance ratings as affected by rater training and perceived purpose of ratings. *Journal of Applied Psychology*, 69(1), 147 – 156.
- Melchers, K. G., Kleinmann, M., & Prinz, M. A. (2010). Do assessors have too much on their plates? The effects of simultaneously rating multiple assessment centre candidates on rating quality. *International Journal of Selection and Assessment*, 18(3), 329 - 341.
- Millar, M. G., & Millar, K. U. (1997). The effects of cognitive capacity and suspicion on truth bias. *Communication Research*, 24(5), 556 – 570.

- Motowidlo, S. J., & Burnett, J. R. (1995). Aural and visual sources of validity in structured employment interviews. *Organisational Behaviour and Human Decision Processes*, 61(3), 239 – 249.
- Murphy, K. R., & Cleveland, J. N. (1995). *Understanding performance appraisal: Social, organisational, and goal-based perspectives*. Thousand Oaks, CA: SAGE Publications, Inc.
- Murphy, K. R., Martin, C., & Garcia, M. (1982). Do behavioural observation scales measure observation? *Journal of Applied Psychology*, 67, 562 – 567.
- n.a. (2018). FAQ: Why is the Mann-Whitney Significant when the Medians are Equal? [UCLA: Institute for Digital Research and Education]. Retrieved from <https://stats.idre.ucla.edu/other/mult-pkg/faq/general/faq-why-is-the-mann-whitney-significant-when-the-medians-are-equal/>
- Naumann, L., Vazire, S., Rentfrow, J., & Gosling, S. D. (2009). Personality judgments based on physical appearance. *Personality and Social Psychology Bulletin*, 35(12), 1661 - 1671.
- Noble, S. A. (1997). *Effect of a time delay on Frame of Reference training*. Paper presented at the 12th annual conference for the Society of Industrial and Organisational Psychology, St. Louis, MO.
- Noonan, L. E., & Sulsky, L. M. (2001). Impact of Frame of Reference and behavioural observation training on alternative training effectiveness criteria in a Canadian military sample. *Human Performance*, 14(1), 3 - 26.
- Oliver, J., Bakker, A.B., Demerouti, E., & De Jong, R. D. (2005). Projection of own on others' job characteristics: Evidence for the false consensus effect in job characteristics information. *International Journal of Selection and Assessment*, 13(1), 63 – 74.

- Paunonen, S. V. (1989). Consensus in personality judgments: Moderating effects of target-rater acquaintance and behaviour observability. *Journal of Personality and Social Psychology*, 56(5), 823 - 833.
- Paunonen, S. V., & Kam, C. (2014). The accuracy of roommate ratings of behaviours versus beliefs. *Journal of Research in Personality*, 52, 55 - 67.
- Pieterse, S. (2016). *Detecting deceptive impression management in interviews: The role of interviewers' individual differences* (Master's thesis). University of Cape Town, South Africa.
- Powell, D. (2007). *Assessing personality in the employment interview: Rater training and individual differences on rating accuracy* (Doctoral dissertation). The University of Western Ontario, Canada.
- Powell, D. M., & Bourdage, J. S. (2016). The detection of personality traits in employment interviews: Can 'good judges' be trained? *Personality and Individual Differences*, 94, 194 - 199.
- Powell, D. M., & Goffin, R. D. (2009). Assessing personality in the employment interview: The impact of training on rater accuracy. *Human Performance*, 22(5), 450 - 465.
- Reger, R. K., Gustafson, L. T., Demarie, S. M., & Mullane, J. V. (1994). Reframing the organisation: Why implementing total quality is easier said than done. *Academy of Management Review*, 19(3), 565 - 584.
- Reinhard, M. A., Scharmach, M., & Muller, P. (2013). It's not what you are, it's what you know: Experience, beliefs, and the detection of deception in employment interviews. *Journal of Applied Social Psychology*, 43(3), 467 - 479.
- Roch, S. G., & O'Sullivan, B. J. (2003). Frame of reference rater training issues: Recall, time and behaviour observation training. *International Journal of Training and Development*, 7(2), 93 - 107.

- Roch, S. G., Woehr, D. J., Mishra, V., & Kieszczynska, U. (2012). Rater training revisited: An updated meta-analytic review of frame-of-reference training. *Journal of Occupational and Organisational Psychology*, 85(2), 370 - 395.
- Rosenfeld, P. (1997). Impression management, fairness, and the employment interview. *Journal of Business Ethics*, 16(8), 801 – 808.
- Rosnow, R. L., & Rosenthal, R. (2014). *Research methods in I-O psychology: A critical approach*. Harlow, Essex: Pearson Education Limited.
- Ross, L., Lepper, M. R., & Hubbard, M. (1975). Perseverance in self-perception and social perception: Biased attributional processes in the debriefing paradigm. *Journal of Personality and Social Psychology*, 32(5), 880 - 892.
- Roulin, N. (2016). Individual differences predicting impression management detection in job interviews. *Personnel Assessment and Decisions*, 2(1), 1 – 11.
- Roulin, N., Bangerter, A., & Levashina, J. (2015). Honest and deceptive impression management in the employment interview: Can it be detected and how does it impact evaluations? *Personnel Psychology*, 68(2), 395 – 444.
- Roulin, N., & Bourdage, J. S. (2017). Once an impression manager, always an impression manager? Antecedents of honest and deceptive impression management use and variability across multiple job interviews. *Frontier in Psychology*, 8, 29.
- Rousseau, D. M. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organisational Psychology*, 74(4), 511 - 541.
- Schleicher, D. J., Day, D. V., Mayes, B. T., & Riggio, R. E. (2002). A new frame for Frame of Reference training: Enhancing the construct validity of assessment centres. *Journal of Applied Psychology*, 87(4), 735 – 746.

- Schneider, L., Powell, D. M., & Roulin, N. (2015). Cues to deception in the employment interview. *International Journal of Selection and Assessment*, 23(2), 182 - 190.
- Sporer, S. L., & Schwandt, B. (2007). Moderators of nonverbal indicators of deception: A meta-analytic synthesis. *Psychology, Public Policy, and Law*, 13(1), 1 - 34.
- Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgment and choice. *Journal of Experimental Social Psychology*, 27(1), 76 - 105.
- Stevens, C. K., & Kristof, A. L. (1995). Making the right impression: A field study of applicant impression management during job interviews. *Journal of Applied Psychology*, 80(5), 587 – 606.
- Stone-Romero, E. F. (2011). Research strategies in industrial and organisational psychology: Nonexperimental, quasi-experimental, and randomized experimental research in special purpose and nonspecial purpose settings. In S. Zedeck (Ed.), *APA Handbooks in Psychology. APA handbook of industrial and organisational psychology, Vol. 1. Building and developing the organisation* (pp. 37-72). Washington, DC, US: American Psychological Association.
- Sulsky, L. M., & Balzer, W. K. (1988). Meaning and measurement of performance rating accuracy: Some methodological and theoretical concerns. *Journal of Applied Psychology*, 73(3), 497 – 506.
- Sulsky, L. M., & Day, D. V. (1992). Frame of Reference training and cognitive categorization: An empirical investigation of rater memory issues. *Journal of Applied Psychology*, 77(4), 501 – 510.
- Sulsky, L. M., & Day, D. V. (1994). Effects of Frame of Reference training on rater accuracy under alternative time delays. *Journal of Applied Psychology*, 79(4), 535 – 543.
- Sulsky, L. M., & Kline, T. J. B. (2007). Understanding Frame of Reference training success: A social learning theory perspective. *International Journal of Training and Development*, 11(2), 121 – 131.

- Swider, B. W., Barrick, M. R., Harris, T. B., & Stoverink, A. C. (2011). Managing and creating an image in the interview: The role of interviewee initial impressions. *Journal of Applied Psychology, 96*(6), 1275 – 1288.
- Taft, R. (1955). The ability to judge people. *Psychological Bulletin, 52*(1), 1 - 23.
- Tross, S. A., & Maurer, T. J. (2008). The effect of coaching interviewees on subsequent interview performance in structured experience-based interviews. *Journal of Occupational and Organisational Psychology, 81*(4), 589 – 605.
- Tsai, W. C., Chen, C. C., & Chiu, S. F. (2005). Exploring boundaries of the effects of applicant impression management tactics in job interviews. *Journal of Management, 31*(1), 108 – 125.
- Uggerslev, K. L., & Sulsky, L. M. (2008). Using Frame of Reference training to understand the implications of rater idiosyncrasy for rating accuracy. *Journal of Applied Psychology, 93*(3), 711 - 719.
- Van Iddekinge, C. H., McFarland, L., & Raymark, P. H. (2007). Antecedents of impression management use and effectiveness in a structured interview. *Journal of Management, 33*(5), 752 – 773.
- Van Iddekinge, C. H., Raymark, P. H., & Roth, P. L. (2005). Assessing personality with a structured employment interview: Construct-related validity and susceptibility to response inflation. *Journal of Applied Psychology, 90*(3), 536 – 552.
- Vernon, P. E. (1933). Some characteristics of the good judge of personality. *The Journal of Social Psychology, 4*(1), 42 - 57.
- Vogt, D. S., & Colvin, R. C. (2003). Interpersonal orientation and the accuracy of personality judgments. *Journal of Personality, 71*(2), 267 - 295.

- Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. *Journal of Personality and Social Psychology*, 78(3), 546 - 558.
- Woehr, D. J. (1994). Understanding frame-of-reference training: The impact of training on the recall of performance information. *Journal of Applied Psychology*, 79(4), 525 – 534.
- Woehr, D. J., & Huffcutt, A. I. (1994). Rater training for performance appraisal: A quantitative review. *Journal of Occupational and Organisational Psychology*, 67(3), 189 – 205.
- Yamagishi, T. (2001). Trust as a form of social intelligence. In K. S. Cook (Ed.), *Trust in society* (pp. 121 – 147). New York, NY: Russell Sage.



**Appendix A**

**Micro and Macro Cues per Type of DIM Tactic as per Schneider et al. (2015)**

Table A1

*Deceptive Slight Image Creation Cues*

Cue Level	Cue Category	Cue
Micro Cues	Verbal Cues	No Silences
Macro Cues		Less Anxiousness No Professionalism

Table A2

*Deceptive Extensive Image Creation Cues*

Cue Level	Cue Category	Cue
Micro Cues	Facial Cues	Not Smiling
	Verbal Cues	Speaking Errors Speaking Quickly No Silences
Macro Cues		-

Table A3

*Deceptive Image Creation Cues (Umbrella Cues)*

Cue Level	Cue Category	Cue
Micro Cues	Facial Cues	Not Smiling
	Verbal Cues	Speaking Errors
		Speaking Quickly
		No Silences
Macro Cues		Less Anxiousness
		No Professionalism

Table A4

*Deceptive Image Protection Cues*

Cue Level	Cue Category	Cue
Micro Cues	Verbal Cues	No Silences
Macro Cues		-

Table A5

*Deceptive Ingratiation Cues*

Cue Level	Cue Category	Cue
Micro Cues	Facial Cues	Not Smiling
	Verbal Cues	No Silences
Macro Cues		Attentiveness
		Less Anxiousness

Table A6

*General Deceptive Impression Management Cues*

Cue Level	Cue Category	Cue
Micro Cues	Facial Cues	Not Smiling
	<i>Restrained Facial Cues</i>	
	Verbal Cues	Speaking Errors
	<i>Unrestrained Verbal Cues</i>	Speaking Quickly No Silences
Macro Cues		Attentiveness
<i>Restrained Macro Cues</i>		Less Anxiousness Less Professionalism Less Movement <i>(i.e., less hand gestures, less head movements)</i>

## Appendix B

### Levashina and Campion's (2007) Interview Faking Behaviour Scale

*Example Item in self-report format*

I said that I am an expert in an area even though I am only familiar with it.

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

#### 1. SLIGHT IMAGE CREATION

(To make an image of a good candidate for the job)

1.1. *Embellishing* (to overstate or embellish answers beyond a reasonable description of the truth)

- a) I said that I am an expert in an area even though I am only familiar with it.
- b) I said that it would take less time to learn the job than I knew it would.
- c) I exaggerated my future goals.
- d) I exaggerated my responsibilities on my previous jobs.
- e) I exaggerated the impact of my performance in my past jobs.
- f) I used examples of my best performance to answer questions about my everyday performance.

1.2. *Tailoring* (to modify or adapt answers to fit the job)

- a) During the interview, I distorted my answers based on the comments or reactions of the interviewer.
- b) During the interview, I distorted my answers to emphasise what the interviewer was looking for.
- c) I distorted my answers based on the information about the job I obtained during the interview.
- d) I distorted my work experience to fit the interviewer's view of the position.
- e) I distorted my qualifications to match qualifications required for the job.
- f) I tried to find out about the organisation's culture and then use that information to fabricate my answers.

1.3. *Fit Enhancing* (to create the impression of a fit with the job or organisation in terms of beliefs, values, or attitudes)

- a) I enhanced my fit with the job in terms of attitudes, values, or beliefs.
- b) I inflated the fit between my values and goals and values and goals of the organisation.
- c) I inflated the fit between my credentials and needs of the organisation.
- d) When asked, I did not mention any disagreements with the organisation's philosophies.
- e) I tried to use information about the company to make my answers sound like I was a better fit than I actually was.

## 2. EXTENSIVE IMAGE CREATION

(To invent an image of a good candidate for the job)

2.1. *Constructing* (to build stories by combining or arranging work experiences to provide better answers)

- a) I told fictional stories prepared in advance of the interview to best present my credentials.
- b) I fabricated examples to show my fit with the organisation.
- c) I made up stories about my work experiences that were well developed and logical.
- d) I constructed fictional stories to explain the gaps in my work experiences.
- e) I told stories that contained both real and fictional work experiences.
- f) I combined, modified and distorted my work experiences in my answers.
- g) I used made-up stories for most questions.

2.2. *Inventing* (to cook up better answers)

- a) I claimed that I have skills that I do not have.
- b) I made up measurable outcomes of performed tasks.
- c) I claimed work experiences that I do not actually have.
- d) I promised that I could meet all job requirements (e.g., working late or on weekends), even though I probably could not.
- e) I misrepresented the description of an event.
- f) I stretched the truth to give a good answer.
- g) I invented some work situations or accomplishments that did not really occur.
- h) I told some 'little white lies' in the interview.

2.3. *Borrowing* (to answer based on the experiences or accomplishments of others)

- a) My answers were based on examples of job performance of other employees.
- b) When I did not have a good answer, I borrowed work experiences of other people and made them sound like my own.
- c) I used other people's experiences to create answers when I did not have good experiences of my own.
- d) I described team accomplishments as primarily my own.

### 3. IMAGE PROTECTION

(To defend an image of a good candidate for the job)

3.1. *Omitting* (to not mention some things in order to improve answers)

- a) When asked directly, I tried to say nothing about my real job-related weaknesses.
- b) I tried to avoid discussion of job tasks that I may not be able to do.
- c) I tried to avoid discussing my lack of skills or experiences.
- d) I tried not to admit that I did not know an answer.
- e) I did not mention that I believed I needed additional training to do the job.
- f) When asked directly, I did not mention my true reason for quitting previous job.

3.2. *Masking* (to disguise or conceal aspects of background to create better answers)

- a) I tried to mention only my limitations that are easily remedied.
- b) I did not reveal my true career intentions about working with the hiring organisation.
- c) I tried not to show my true personality.
- d) When asked directly, I did not mention some problems that I had in past jobs.
- e) I did not reveal requested information that might hurt my chances of getting a job.
- f) I talked mainly about my strengths to mask my weaknesses.
- g) I covered up some 'skeletons in my closet.'

3.3. *Distancing* (to improve answers by separating from negative events or experiences)

- a) I tried to suppress my connection to negative events in my work history.
- b) I clearly separated myself from my past work experiences that would reflect poorly on me.
- c) I tried to convince the interviewer that factors outside of my control were responsible for some negative outcomes even though it was my responsibility.

#### 4. INGRATIATION

(To gain favour with the interviewer to improve the appearance of a good candidate for the job)

4.1. *Opinion Conforming* (to express beliefs, values, or attitudes held by the interviewer or organisation)

- a) I tried to adjust my answers to the interviewer's values and beliefs.
- b) I tried to agree with interviewer outwardly even when I disagree inwardly.
- c) I tried to find out interviewer's views and incorporate them in my answers as my own.
- d) I tried to express the same opinions and attitudes as the interviewer.
- e) I tried to appear similar to the interviewer in terms of values, attitudes, or beliefs.
- f) I tried to express enthusiasm or interest in anything the interviewer appeared to like even if I did not like it.
- g) I did not express my opinions when they contradicted the interviewer's opinions.
- h) I tried to show that I shared the interviewer's views and ideas even if I did not.

4.2. *Interviewer or Organisation Enhancing* (to insincerely praise or compliment the interviewer or organisation)

- a) I laughed at the interviewer's jokes even when they were not funny.
- b) I exaggerated the interviewer's qualities to create the impression that I think highly of him/her.
- c) I exaggerated my positive comments about the organisation.
- d) I complimented the organisation on something, however insignificant it may actually be to me.

## Appendix C

### Example Interview Transcript (Target 1: Interview with a Doctor)

**Q1: Please tell me why you decided to study medicine?**

**A1:** Ummm... Initially, I decided to study medicine because I was driven to help others. In addition, I have always been fascinated by the human body (*hand gesture*). When I was growing up, my favorite series was Gary's ... Grey's Anatomy (*speaking error*). I used to binge watch episodes while simultaneously researching treatments for the different medical issues discussed on the show (*speaking quickly with no silences, not smiling*). In high school, I was inspired to study medicine at UCT by my matric biology teacher who recognized my talent (*nodding*).

Commented [MM1]: DIM: "I stretched the truth to give a good answer"

**Q2: As a young doctor, there are many career options available to you. For example, you could study further to pursue a specialization of your choice, or you could join a general practitioner's private practice. Why would you want to work for a state hospital? Please discuss.**

**A2:** Uhm - I have considered studying further, but I want to gain more work experience first (*blinks*). Oh, I also need to finish paying off my student loans before I specialize (*tapping hands on legs*). Uhm (*job applicant visibly relaxes in their chair – no sign of anxiousness*) - Although I would earn a lot more in private practice, I want to work in a state hospital where I give back to the community. This speaks to my personality; I am kind-hearted, and I value acts of clarity... sorry, I mean charity (*speaking quickly with errors and no silences*). Furthermore, I am interested in specializing in pediatrics one day and I feel that I will get more exposure to children working as a doctor at Red Cross Children's Hospital (*maintaining eye contact*). It has always been a dream of mine to work for this amazing organization. Red Cross's rich history and mission to serve underprivileged community members is so inspiring (*no silences, not smiling*).

Commented [MM2]: DIM: "During the interview, I distorted my answers to emphasise what the interviewer was looking for"

Commented [MM3]: DIM: "I exaggerated my positive comments about the organisation"

**Q3: Why do you think you will do well in this position?**

**A3:** I believe that I will do well in this role because I have the relevant skills and experience to succeed (*smiling*). I am also a quick learner (*silence*) ... I will be able to adapt to the hospital's system and culture. Uhm - in addition, I am motivated to succeed because being a good doctor at Red Cross would bring me personal fulfillment and job satisfaction (*speaking relatively slowly*).



**Q4:** At Red Cross, we always do our best to ensure that patients receive high quality medical care. Please consider the following situation: A mother brings her child to Red Cross for urgent medical attention. Unfortunately, the pair only speak isiXhosa and you do not. In addition, due to recent budget cuts, the hospital has lost a significant amount of funding and is running seriously low on medical supplies. Please describe your behavior in this situation.

**A4:** Oh, as a doctor, I have good communication skills. I am mostly able to understand and convey information to my patients regardless of the language they speak. In a situation like this, I would communicate with the pair using hand gestures to start (*gestures hands*). Once I had assessed the situation, I would ask a nurse who speaks isiXhosa to help me translate. With regard to the lack of medical supplies – this would not be a problem for me. During my ComServe, (*lack of professionalism*) I worked in under resourced South African hospitals and clinics. From this experience, I learned how to work in a team, as well as to be flexible and resourceful in my approach to solving medical problems. Uhm - For example, I once worked on a brace – excuse me, “case” (*speaking error*) - in which a farm worker had caught his arm inside a harvester’s blades (*shakes head*). He urgently needed several stitches, but when he arrived at the clinic, we had run out of thread. I had to think on my feet – I quickly stitched the wounds using sterilized dental floss as an effective temporary measure to close the wounds (*not smiling, speaking quickly with no silences*). Therefore, in this situation at Red Cross, I would be able to make-do with whatever supplies were available to me, while still providing high quality medical care.

**Commented [MM4]:** DIM: “I told fictional stories prepared in advance to best present my credentials”

**Q5:** What are your weaknesses?

**A5:** (*Job applicant responds quickly with no silences*) I am not aware of any weaknesses. (*Job applicant notices interviewer frowning and quickly changes tactic*) Although, come to think of it, my greatest weakness is that I care too much about my patients (*not smiling, speaking quickly with no silences*). Uhm – I think it’s important that you know I’ve never actually been called out on this. My patients and their families are always grateful for my support! (*no silences*).

**Commented [MM5]:** DIM: “I tried to avoid discussion of job tasks that I may not be able to do”

OR

DIM: “I tried to avoid discussing my lack of experience or skills”

**Commented [MM6]:** DIM: “During the interview, I distorted my answers based on the comments or reactions of the interviewer”

**Commented [MM7]:** DIM: “I clearly separated myself from past work experiences that would reflect poorly on me”

## Appendix D

### Mock Employment Interviews: Target Sample Information

Table D1

*Targets: Role, Demographics, and Placement*

Target	Role	Actor Demographics		Placement
		Race	Gender	
Target 1	Doctor	Coloured	Male	‘Practice Example’ SMEs and FORT Intervention
Target 2	Manager	White	Female	‘Fun Task 1’ FORT Intervention
Target 3	Graduate	Black	Female	DIM Test 1A
<del>Target 4</del>	<del>Nurse</del>	<del>Black</del>	<del>Female</del>	<del>Removed due to low ICC</del>
Target 5	Engineer	White	Male	DIM Test 1B
Target 6	Chef	Coloured	Female	‘Fun Task 2’ FORT Intervention
Target 7	Waitress	White	Female	DIM Test 3B
Target 8	Pilot	Black	Female	DIM Test 3C
Target 9	Lawyer	Coloured	Male	DIM Test 3A

Table D2

*Descriptive Statistics for Actors’ Demographics*

Demographic		Frequency	Percentage
Race	Black	2	25%
	White	3	37.5%
	Coloured	3	37.5%
Gender	Male	3	37.5%
	Female	5	62.5%

## Appendix E

### Actor's Letter of Informed Consent (Role: Interviewer)



I \_\_\_\_\_ (role: 'interviewer') hereby voluntarily agree to act out ten interview transcripts for research purposes. I am aware that the researcher will video-record me and my partners while we act out interview transcripts containing deceptive cues. I am also aware that these videos will be replayed to research participants as part of a research study conducted by a masters student in UCT's Department of Organisational Psychology.

Although I will appear in the video-recorded mock interviews, I am aware that my identity will be kept confidential. The researcher does not have permission to disclose my name and/or contact details to third parties.

As agreed, I will be paid R1000 in cash as remuneration for my time. I am aware that I will only be paid at the end of filming, provided I have completed my acting task. I am aware that I will be paid on a 'once-off cash basis'. I will not receive royalties if the videos are used in future academic research. After filming, I will provide my signature to confirm that I have received the R1000 cash payment and a letter of recommendation.

Date \_\_\_\_\_

Yes, I consent to the above: Signature \_\_\_\_\_

I have completed my acting task. I have received R1000 cash payment and a letter of recommendation:

Signature \_\_\_\_\_

## Appendix F

### Actor's Letter of Informed Consent (Role: Candidate)



I \_\_\_\_\_ hereby voluntarily agree to act out an interview transcript for research purposes. I am aware that the researcher will video-record me and my partner while we act out an interview transcript containing deceptive cues. I am also aware that this video will be replayed to research participants as part of a research study conducted by a masters student in UCT's Department of Organisational Psychology.

Although I will appear in a video-recorded mock interview, I am aware that my identity will be kept confidential. The researcher does not have permission to disclose my name and/or contact details to third parties.

As agreed, I will be paid R200 in cash as remuneration for my time. I am aware that I will only be paid at the end of filming, provided I have completed my acting task. I am aware that I will be paid on a 'once-off cash basis'. I will not receive royalties if the video is used in future academic research. After filming, I will provide my signature to confirm that I have received the R200 cash payment and a letter of recommendation.

Date \_\_\_\_\_

Yes, I consent to the above: Signature \_\_\_\_\_

I have completed my acting task. I have received R200 cash payment and a letter of recommendation:

Signature \_\_\_\_\_

## Appendix G

### Subject Matter Experts' (SMEs) Letter of Informed Consent



Dear Subject Matter Expert (SME)

UCT's Department of Organisational Psychology requires masters students to conduct a research study. This research study investigates Deceptive Impression Management (DIM) in employment interviews. This study has been approved by the Faculty of Commerce Ethics in Research Committee and the Department of Student Affairs. If you voluntarily participate in this study, your responses will be kept anonymous and confidential. The results of this study will only be used for research purposes at UCT. You are free to leave this study at any time without experiencing any negative consequences or repercussions. As a SME, you will be required to watch 9 video-recorded mock employment interviews (vignettes) which all contain deception. You will be asked to: (a) state when you detect DIM cues, (b) rate the extent to which each candidate was both honest/truthful and deceptive, (c) rate the extent to which each candidate engaged in each type of DIM tactic, and (d) rate the degree of realism for each vignette. The above will take approximately 60 minutes to complete.

If you voluntarily consent to participating, please provide your signature and date below:

---

*SME's Signature*

---

*Date of Participation*

If you have any questions or concerns regarding this research study, please do not hesitate to contact the researcher: Megan Martin ([mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za)) or the research supervisor: Francois De Kock ([francois.dekock@uct.ac.za](mailto:francois.dekock@uct.ac.za)).

## Appendix H

### Example Worksheet used in True Score Development and FORT

*\*True scores highlighted in yellow*

#### Example: Target 1 -Doctor (length: 04:20)

A. Do you detect a deceptive cue at this point? Please circle your answer.

1. Time: 00:10

Yes	No	Unsure
-----	----	--------

2. Time: 00:17

Yes	No	Unsure
-----	----	--------

3. Time: 00:32

Yes	No	Unsure
-----	----	--------

4. Time: 01:18

Yes	No	Unsure
-----	----	--------

5. Time: 01:33

Yes	No	Unsure
-----	----	--------

6. Time: 01:39

Yes	No	Unsure
-----	----	--------

7. Time: 01:53

Yes	No	Unsure
-----	----	--------

8. Time: 02:04

Yes	No	Unsure
-----	----	--------

9. Time: 02:47

Yes	No	Unsure
-----	----	--------

10. Time: 02:51

Yes	No	Unsure
-----	----	--------

11. Time: 03:05

Yes	No	Unsure
-----	----	--------

12. Time: 03:20

Yes	No	Unsure
-----	----	--------

13. Time: 03:38

Yes	No	Unsure
-----	----	--------

14. Time: 03:56

Yes	No	Unsure
-----	----	--------

15. Time: 04:10

Yes	No	Unsure
-----	----	--------

**B. In your opinion, please rate the extent to which the candidate was:**

1. Honest/ Truthful.

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

2. Deceptive

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

**C. In your opinion, please rate the extent to which the candidate engaged in:**

1. Deceptive Image Creation.

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

2. Deceptive Ingratiation.

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

3. Deceptive Image Protection.

To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
1	2	3	4	5

**D. In your opinion, please rate the degree of realism of the interview vignettes:**

Unrealistic			Moderately Realistic				Highly Realistic		
1	2	3	4	5	6	7	8	9	10

Thank you for your time ☺

## Appendix I

### Letter of Ethical Clearance



#### Faculty of Commerce

Private Bag X3, Rondebosch, 7701

2.26 Leslie Commerce Building, Upper Campus

Tel: +27 (0) 21 650 4375/ 5748 Fax: +27 (0) 21 650 4369

E-mail: [com-faculty@uct.ac.za](mailto:com-faculty@uct.ac.za)

Internet: [www.uct.ac.za](http://www.uct.ac.za)



@Commerce\_UCT



UCT Commerce Faculty Office

26/06/2018

Ms Megan Martin  
School of Management  
Studies  
University of Cape Town

REF: REC 2018/006/046

Dear Megan Martin,

**Designing, Implementing and Evaluating a Training Intervention Aimed at Improving Judges' Deceptive Impression Management (DIM) Rating Accuracy in Employment Interviews: A Randomised Control Trial**

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid for 1 year and may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants. The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

Modie Sempu  
Administrative Assistant  
University of Cape Town  
Commerce Faculty Office  
Room 2.26 | Leslie Commerce Building

Office Telephone: +27 (0)21 650 2695/4375

Office Fax: +27 (0)21 650 4369

E-mail: [modie.sempu@uct.ac.za](mailto:modie.sempu@uct.ac.za)

Website: [www.commerce.uct.ac.za](http://www.commerce.uct.ac.za)<<http://www.commerce.uct.ac.za/>



## Appendix J

### Department of Student Affairs (DSA) Approval Letter

	<b>RESEARCH ACCESS TO STUDENTS</b>	<b>DSA 100</b>
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#### NOTES

- This form must be **FULLY** completed by all applicants who want to access UCT students for the purpose of research or surveys.
- Return the fully completed (a) **DSA 100** application form by email, in the same word format, together with your: (b) research proposal inclusive of your survey, (c) copy of your ethics approval letter / proof (d) informed consent letter to: [Moonira.Khan@uct.ac.za](mailto:Moonira.Khan@uct.ac.za). Your application will be attended to by the Executive Director, Department of Student Affairs (DSA), UCT.
- The turnaround time for a reply is **approximately 10 working days**.
- NB: It is the responsibility of the researcher/s to apply for and to obtain **ethics approval and to comply with amendments that may be requested**; as well as to **obtain** approval to access UCT staff and/or UCT students, from the following, at UCT, respectively: (a) **Ethics**: Chairperson, Faculty Research Ethics Committee' (FREC) for ethics approval, (b) **Staff access**: Executive Director: HR for approval to access UCT staff, and (c) **Student access**: Executive Director: Student Affairs for approval to access UCT students.
- Note**: UCT Senate Research Protocols requires compliance to the above, **even if prior approval has been obtained from any other institution/agency**. UCT's research protocol requirements applies to **all** persons, institutions and agencies from UCT and external to UCT who want to conduct research on human subjects for academic, marketing or service related reasons at UCT.
- Should approval be granted to access UCT students for this research study, such approval is effective for a period of one year from the date of approval (as stated in Section D of this form), and the approval expires automatically on the last day.
- The approving authority reserves the right to revoke an approval based on reasonable grounds and/or new information.

#### SECTION A: RESEARCH APPLICANT/S DETAILS

Position	Staff / Student No	Title and Name	Contact Details (Email / Cell / land line)
A.1 Student Number	MRTMEG005	Miss Megan Anne Martin	Email: <a href="mailto:mrtmeg005@myuct.ac.za">mrtmeg005@myuct.ac.za</a> / 0721816386 / (021) 6711366
A.2 Academic / PASS Staff No.			
A.3 Visitor/ Researcher ID No.			
A.4 University at which a student or employee	University of Cape Town (UCT)	Address if <u>not</u> UCT:	
A.5 Faculty/ Department/School	Faculty of Commerce, School of Management Studies, Department of Organisational Psychology		
A.6 APPLICANTS DETAILS If different from above	Title and Name	Tel.	Email

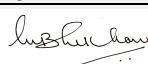
#### SECTION B: RESEARCHER/S SUPERVISOR/S DETAILS

Position	Title and Name	Tel.	Email
B.1 Supervisor	Assoc Prof Francois De Kock	(021) 650 2181	<a href="mailto:francois.dekock@uct.ac.za">francois.dekock@uct.ac.za</a>
B.2 Co-Supervisor/s			

#### SECTION C: APPLICANT'S RESEARCH STUDY FIELD AND APPROVAL STATUS

C.1 Degree – if applicable	Master of Commerce (MCom) in Organisational Psychology
C.2 Research Project Title	Designing, Implementing and Evaluating a Training Intervention Aimed at Improving Judges' Deceptive Impression Management (DIM) Rating Accuracy in Employment Interviews: A Randomised Control Trial
C.3 Research Proposal	Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
C.4 Target population	UCT students
C.5 Lead Researcher details	If different from applicant: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
C.6. Will use research assistant/s	If yes- provide a list of names, contact details : <input type="checkbox"/>
C.7 Research Methodology and Informed consent	Research methodology: Randomised Control Trail (True Experimental Design) Informed consent: Yes, advised
C.8 Ethics clearance status from UCT's Faculty Ethics in Research Committee /Chair (EIRC)	Approved by the UCT EIRC: Yes <input checked="" type="checkbox"/> With amendments: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (a) Attach copy of your UCT ethics approval. Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (b) State date / Ref. No / Faculty of your UCT ethics approval: 26/06/2018 Ref. /Faculty.: REC 2018/006/046

#### SECTION D: APPLICANT/S APPROVAL STATUS FOR ACCESS TO STUDENTS FOR RESEARCH PURPOSE (To be completed by the UCT - ED, DSA or Nominee)

D.1 APPROVAL STATUS	Approved / With Terms / Not	* Conditional approval with terms	Applicant/s Ref. No.:
(i) Approved <input checked="" type="checkbox"/> (ii) With terms <input type="checkbox"/> (iii) Not approved <input type="checkbox"/>	a) Access to students for this research study must only be undertaken <u>after</u> written ethics approval has been obtained. b) In event any ethics conditions are attached, these must be complied with <u>before</u> access to students.	MRTMEG005 / Miss Megan Anne Martin	
D.2 APPROVED BY:	Designation Executive Director Department of Student Affairs	Name Dr Moonira Khan	Signature  Date of Approval 20 July 2018

## Appendix K

### Email Advertising Study to 24 000 UCT Student Subscribers

'Dear UCT student,

You are invited to participate in a research study which investigates deception (lying and/or faking) in employment interviews.

If you voluntarily choose to participate in this study, you will receive a cash research participation incentive of R100.

Due to the nature of this research, participants are required to attend the study in person. Participation is estimated to take approximately 1 - 2 hours. The research study will be conducted at UCT from Monday 13 August - Friday 17 August 2018.

In keeping with ethical requirements, participation is voluntary and participants' identities will be kept confidential. Participants are free to withdraw from this study at any point.

If you are interested in participating, please send an email to: [uctresearchstudy@gmail.com](mailto:uctresearchstudy@gmail.com)

You will be allocated to a participation time slot that suits your schedule.

Your participation will be much appreciated. I look forward to hearing from you,

Kind regards

Megan Martin - Researcher

If you have any queries, please contact me on: [mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za)'

## Appendix L

*\*Profile images blurred to ensure targets' confidentiality and anonymity*

### Qualtrics Survey



UNIVERSITY OF CAPE TOWN  
**FACULTY OF COMMERCE**  
Igniting Knowledge and Opportunity



Dear Student Participant

UCT's Department of Organisational Psychology requires masters students to conduct a research study. This research study investigates Deceptive Impression Management (DIM) in employment interviews.

This study has been approved by the Faculty of Commerce Ethics in Research Committee and the Department of Student Affairs.

If you voluntarily participate in this study, your responses will be kept anonymous and confidential. The results of this study will only be used for research purposes at UCT. This study requests demographical information for statistical purposes only. If you complete the full study, you are entitled to a financial research participation incentive of R100 in cash. You will only receive your research participation incentive at the end of the semester, NOT immediately after this study. You are free to leave this study at any time without experiencing any negative consequences or repercussions. However, if you leave this study early, you will not receive the research participation incentive. Your participation in this study does not pose any harm to yourself or anyone else.

Please voluntarily disclose your email address. This information will not be used to identify you and it will be kept confidential. The researcher will use your email address to notify you when your research participation incentive is ready for collection. If you do not want to disclose your email address, please write an anonymous identity on your letter of informed consent (e.g., 'participant\_123'). Please provide your email address/anonymous identity when collecting your research participation incentive at the Department of Organisational Psychology at the end of the semester. For those using an anonymous identity, please collect your research participation incentive on the 17th of October 2018 at the Department of Organisational Psychology from 13:00 - 16:30pm. During this study, you will be asked to watch several video-recorded mock employment interviews which contain deception (lying/faking), while also rating the deception in each interview. In addition, you will be asked to complete a short text-based assessment. This study is expected to take approximately 60 – 120 minutes to complete. If you have any

questions or concerns regarding this research study, please do not hesitate to contact the researcher: Megan Martin (mrtmeg005@myuct.ac.za) or the research supervisor: Francois De Kock (francois.dekock@uct.ac.za).

I consent to the above

☐ Yes

Please provide your email address OR anonymous identify

---

Please select your group number

☐ Group 1

☐ Group 2

☐ Group 3

☐ Group 4

☐ Group 5

☐ Group 6

☐ Group 7

☐ Group 8

☐ Group 9

☐ Group 10

☐ Group 11

Are you a student at UCT?

☐ Yes

☐ No

Which degree are you currently enrolled for?

- ☐ Undergraduate
- ☐ Honours
- ☐ Masters
- ☐ PhD

Which faculty are you in?

- ☐ Commerce
- ☐ Engineering and the Built Environment (EBE)
- ☐ Health Sciences
- ☐ Humanities
- ☐ Law
- ☐ Science
- ☐ Graduate School of Business (GSB)
- ☐ Centre for Higher Education Development (CHED)

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other
- ☐ Prefer not to answer

What is your race?

- ☐ Asian
- ☐ African
- ☐ Coloured
- ☐ Indian
- ☐ White/Caucasian
- ☐ Other
- ☐ Prefer not to answer

How old are you (years)?

---

Have you been in the role of an 'interviewer' in an employment interview before?

☐ Yes

☐ No

Have you been a candidate in an employment interview before?

☐ Yes

☐ No

---

QUESTION: DIM 1A & DIM 1B

#### INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/faking), while adhering to the following steps:

1. When you detect a deceptive example (i.e., a verbal/ non-verbal behaviour indicating lying/faking), please hit 'pause' to pause the video.
2. Write the time at which you detected the deceptive example in the space below. The time MUST be written in the correct format (e.g. 1:34).
3. Press 'enter' to start a new paragraph.
4. Hit 'play' again to continue playing the video.
5. Continue the above steps until the video is finished.



THE FOLLOWING EXAMPLE ANSWER IS PROVIDED FOR YOU. PLEASE USE THIS EXAMPLE ANSWER AS A REFERENCE. YOUR ANSWER TO DIM 1A & DIM1B SHOULD LOOK LIKE THIS TOO.



View time of deceptive cue in bottom left corner (e.g. 1:34)

EXAMPLE ANSWER: DOCTOR

0:17

1:18

1:33

1:39

2:47

3:05

3:20

3:38

3:56

4:10

---

QUESTION: DIM 1A (10 minutes)

### INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/faking), while adhering to the following steps:

1. When you detect a deceptive example (i.e., a verbal/ non-verbal behaviour indicating lying/faking), please hit 'pause' to pause the video.
2. Write the time at which you detected the deceptive example in the space below. The time MUST be written in the correct format (e.g. 1:34).
3. Press 'enter' to start a new paragraph.
4. Hit 'play' again to continue playing the video.
5. Continue the above steps until the video is finished.



QUESTION DIM 1A: GRADUATE

---

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Honest (Truthful)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive (Lying/ Faking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[illegible]

QUESTION: DIM 1B (10 minutes)

## INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/faking), while adhering to the following steps:

1. When you detect a deceptive example (i.e., a verbal/ non-verbal behaviour indicating lying/faking) , please hit 'pause' to pause the video.
2. Write the time at which you detected the deceptive example in the space below. The time **MUST** be written in the correct format (i.e., 1:34).
3. Press 'enter' to start a new paragraph.
4. Hit 'play' again to continue playing the video.
5. Continue the above steps until the video is finished.



QUESTION DIM 1B: ENGINEER

---

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Honest (Truthful)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive (Lying/Faking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[illegible]

QUESTION: DIM 2 (20 minutes)

## INSTRUCTIONS

Please match each deceptive example (vertical axis) with the correct type of deceptive tactic (horizontal axis). You can use the following DECEPTIVE TACTIC DEFINITIONS to guide you:

**DECEPTIVE IMAGE CREATION:** To make an image of a good candidate for the job. To construct/invent/borrow experiences and accomplishments in response to a question

**DECEPTIVE INGRATIATION:** To gain favour with the interviewer to improve the appearance of a good candidate for the job. To express insincere beliefs and values to conform to those held by the interviewer/organisation

**DECEPTIVE IMAGE PROTECTION:** To defend an image of a good candidate for the job. To mask or omit negative job-related experiences

	Deceptive Image Creation	Deceptive Ingratiation	Deceptive Image Protection
A. Candidate exaggerates the responsibilities on their previous jobs (candidate appears to show less professionalism).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. The candidate tries to exaggerate the interviewer's qualities to create the impression that they think highly of the interviewer (candidate is attentive to the interviewer).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. The candidate distorts their answers based on the information about the job they obtain during the interview (candidate does not appear to be anxious).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. The candidate tries to avoid discussing job tasks that they may not be able to do (speaking with no silences).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E. The candidate inflates the fit between their values and goals and the values and goals of the organisation (speaking with no silences).



F. The candidate tries to express the same opinions and attitudes as the interviewer (not smiling).



G. The candidate tries to avoid discussing their lack of skills or experiences (speaking with no silences).



H. The candidate tells fictional stories prepared in advance of the interview to best present their credentials (not smiling).



I. The candidate clearly separates themselves from past work experiences that would reflect poorly on them (speaking with no silences).





J. The candidate makes up stories about their work experiences that are well developed and logical (speaking with errors).



K. The candidate tries to appear similar to the interviewer in terms of values, attitudes, or beliefs (speaking with no silences).



L. The candidate stretches the truth to give a good answer (speaking quickly).



M. The candidate tries to suppress their connection to negative events in their work history (speaking with no silences).



N. The candidate exaggerates their positive comments about the organisation (candidate does not appear to be anxious).



O. When the candidate does not have a good answer, they borrow the experiences of other people and makes them sound like their own (speaking quickly).



## QUESTION: DIM 3A

## INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/ faking).

Pay close attention to the candidate's verbal and non-verbal behaviours. You will use the information you observe to complete the short questionnaire on the next page.

After watching the video, please click 'next' to continue to the next page.



## QUESTION DIM 3A: LAWYER

## QUESTION: DIM 3A

Please consider the video-recorded mock employment interview you watched on the previous page.

Based on your observation of the candidate (i.e. lawyer) , please complete the following questions. You may use the DECEPTIVE TACTIC DEFINITIONS below to guide you:

DECEPTIVE IMAGE CREATION: To make an image of a good candidate for the job. To construct/invent/borrow experiences and accomplishments in response to a question

DECEPTIVE INGRATIATION: To gain favour with the interviewer to improve the appearance of a good candidate for the job. To express insincere beliefs and values to conform to those held the interviewer/organisation

DECEPTIVE IMAGE PROTECTION: To defend an image of a good candidate for the job. To mask or omit negative job-related experiences

-----

In your opinion, to what extent did the candidate (i.e. lawyer) use each deceptive tactic?

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Deceptive Image Creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Ingratiation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Image Protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, which deceptive tactic did the candidate (i.e. lawyer) use the most?

- ☐ Deceptive Image Creation
- ☐ Deceptive Ingratiation
- ☐ Deceptive Image Protection

In your opinion, please rate the extent to which the candidate (i.e. lawyer) was:

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Honest (Truthful)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive (Lying/Faking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----

In your opinion, how realistic is the above video-recorded mock interview (i.e. DIM 3A)?

	1	2	3	4	5	6	7	8	9	10	
Highly Unrealistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Highlight Realistic

\_\_\_\_\_

## QUESTION: DIM 3B

## INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/ faking).

Pay close attention to the candidate's verbal and non-verbal behaviours. You will use the information you observe to complete the short questionnaire on the next page.

After watching the video, please click 'next' to continue to the next page.



## QUESTION DIM 3B: WAITRESS

## QUESTION: DIM 3B

Please consider the video-recorded mock employment interview you watched on the previous page.

Based on your observation of the candidate (i.e. waitress) , please complete the following questions. You may use the DECEPTIVE TACTIC DEFINITIONS below to guide you:

DECEPTIVE IMAGE CREATION: To make an image of a good candidate for the job. To construct/invent/borrow experiences and accomplishments in response to a question

DECEPTIVE INGRATIATION: To gain favour with the interviewer to improve the appearance of a good candidate for the job. To express insincere beliefs and values to conform to those held by the interviewer/organisation

DECEPTIVE IMAGE PROTECTION: To defend an image of a good candidate for the job. To mask or omit negative job-related experiences

-----



In your opinion, to what extent did the candidate (i.e. waitress) use each deceptive tactic?

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Deceptive Image Creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Ingratiation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Image Protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, which deceptive tactic did the candidate (i.e. waitress) use the most?

- ☐ Deceptive Image Creation
- ☐ Deceptive Ingratiation
- ☐ Deceptive Image Protection

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Honest (Truthful)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive (Lying/Faking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[illegible]

QUESTION: DIM 3C

## INSTRUCTIONS

Please insert your earphones.

Please watch the following video-recorded mock employment interview containing deception (lying/ faking).

Pay close attention to the candidate's verbal and non-verbal behaviours. You will use the information you observe to complete the short questionnaire on the next page.

After watching the video, please click 'next' to continue to the next page.



QUESTION DIM 3C: PILOT

QUESTION: DIM 3C

Please consider the video-recorded mock employment interview you watched on the previous page.

Based on your observation of the candidate (i.e. pilot), please complete the following questions. You may use the DECEPTIVE TACTIC DEFINITIONS below to guide you:

DECEPTIVE IMAGE CREATION: To make an image of a good candidate for the job. To construct/invent/borrow experiences and accomplishments in response to a question

DECEPTIVE INGRATIATION: To gain favour with the interviewer to improve the appearance of a good candidate for the job. To express insincere beliefs and values to conform to those held by the interviewer/organisation

DECEPTIVE IMAGE PROTECTION: To defend an image of a good candidate for the job. To mask or omit negative job-related experiences

-----

In your opinion, to what extent did the candidate (i.e. pilot) use each deceptive tactic?

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Deceptive Image Creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Ingratiation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive Image Protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, which deceptive tactic did the candidate (i.e. pilot) use the most?

- ☐ Deceptive Image Creation
- ☐ Deceptive Ingratiation
- ☐ Deceptive Image Protection

	To no extent	To a little extent	To a moderate extent	To a considerable extent	To a very great extent
Honest (Truthful)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deceptive (Lying/Faking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1	2	3	4	5	6	7	8	9	10		
Highly Unrealistic		C	C	C	C	C	C	C	C	C		Highly Realistic

Thank you very much for participating in my study.

If you provided your email address on the letter of informed consent, I will notify you via email when your research participation incentive of R100 cash is ready for collection.

If you provided an anonymous identity on the letter of informed consent, please collect your research participation incentive of R100 cash on the 17th of October 2018 at the Department of Organisational Psychology from 13:00 - 16:30pm.

Please click 'next' to submit your responses.

Have a nice day :)

---

**Appendix M****Control Group PowerPoint Slides**

# Deceptive Impression Management (DIM) in Employment Interviews

*Please listen to all instructions carefully.*



Please Type This URL Into Your Preferred Search Engine

[https://ucpcommerce.eu.qualtrics.com/jfe/form/SV\\_exNV7sYfmhthg9v](https://ucpcommerce.eu.qualtrics.com/jfe/form/SV_exNV7sYfmhthg9v)

*Please listen to all instructions carefully.*





## Participants' Rights: Informed Consent & Demographics

1. This study has been approved by UCT's **Faculty of Commerce Ethics in Research Committee** and the **Department of Student Affairs**.
2. Your participation in this study is voluntary.
3. All of your responses will be anonymous and confidential.
4. The results from this study will only be used for research purposes at UCT.
5. Please answer all the questions about your demographics. This information will be used for statistical purposes only.
6. If you complete the full study, you are entitled to a **financial research participation incentive of R100 cash**. You will not receive anything if you leave the study early.
7. You are free to leave the study at any point in the research process without experiencing any consequences or repercussions.
8. Your participation in this study does not pose harm to yourself or anyone else.
9. Please voluntarily disclose your email address. This information will not be used to identify you and it will be kept confidential. The researcher will use your email address to notify you when your research participation incentive is ready for collection. If you do not want to disclose your email address, please write an anonymous identity on your letter of informed consent (e.g., "participant\_123"). Please provide your email address/anonymous identify when collecting your research participation incentive at the Department of Organisational Psychology at the end of the semester. For those using an anonymous identity, please collect your research participation incentive on the 17th of October 2018 at the Department of Organisational Psychology from 13:00 - 16:30pm.
10. If you have any questions and/or concerns, please contact me [mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za) or my supervisor [francois.dekok@uct.ac.za](mailto:francois.dekok@uct.ac.za)
11. If you do not want to take part in this study, please leave the venue now.
12. If you choose to participate, please complete click "yes" on the letter of informed consent now.

## Agenda and DIM Assessment Outline

1. Assessment Introduction: 10 minutes
  2. DIM Test 1: 20 minutes
  3. DIM Test 2: 15 minutes
  4. DIM Test 3: 15 minutes
- } 50 minutes

## Question: DIM 1A & DIM 1B (20 minutes)

*Please listen to all instructions carefully.*



## DIM 1A & DIM 1B Instructions

1. Please insert your earphones.
2. Please watch the following video-recorded mock employment interview containing deception (lying/faking), while adhering to the following steps:
3. When you detect a deceptive example (i.e., a verbal/ non-verbal behaviour indicating lying/faking) , please hit "pause" to pause the video.
4. Write the time at which you detected the deceptive example in the space below. The time MUST be written in the correct format (e.g. 1:34).
5. Press "enter" to start a new paragraph.
6. Hit "play" again to continue playing the video.
7. Continue the above steps until the video is finished.

## DIM Test 2 (20 minutes)

*Please listen to all instructions carefully.*



## DIM Test 2 Instructions

1. Please match each deceptive example (vertical axis) with the correct type of deceptive tactic (horizontal axis). You can use the following DECEPTIVE TACTIC DEFINITIONS to guide you:

DECEPTIVE IMAGE CREATION:	<p>To make an image of a good candidate for the job.</p> <p>To construct/invent/borrow experiences and accomplishments in response to a question.</p>
DECEPTIVE INGRATIATION:	<p>To gain favour with the interviewer to improve the appearance of a good candidate for the job.</p> <p>To express insincere beliefs and values to conform to those held by the interviewer/organisation.</p>
DECEPTIVE IMAGE PROTECTION:	<p>To defend an image of a good candidate for the job.</p> <p>To mask or omit negative job-related experiences</p>

2. Do not request help from the student(s) sitting next to you.
3. If you need help, please raise your hand and the researcher will assist you.

## DIM Test 3 (15 minutes)

*Please listen to all instructions carefully.*



### DIM Test 3 Instructions

1. Please watch the following three video-record mock employment interviews containing deception (lying/ faking).
2. Pay close attention to the job applicant's verbal and non-verbal behaviours. You will use the information you observe to complete the short questionnaire on the next page.
3. After watching the video, please click "next" to continue to the next page.
4. When you finish DIM Test 3, do not leave the venue before the researcher says so.
5. Do not request help from the student(s) sitting next to you.
6. If you need help, please raise your hand and the researcher will assist you.
7. Please insert your earphones and press "play" on your screen now.

## Deception: Debriefing

Please note that you were randomly assigned to the **control group**.

Therefore, you did not receive training (unlike the experimental group).

If you would like to receive optional training at a later stage, please email the researcher at [uctresearchstudy@gmail.com](mailto:uctresearchstudy@gmail.com) with the subject line "debriefing" by Friday the 17<sup>th</sup> of August 2018. If requested, the researcher will allocate you to a training session after the study.



## End of Study

*Thank you for your participation.*

If you have any questions and/or concerns, please contact me [mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za) or my supervisor [francois.dekock@uct.ac.za](mailto:francois.dekock@uct.ac.za)



## Appendix N

### FORT Materials: Experimental Group PowerPoint Slides

*\*Profile images blurred to ensure targets' confidentiality and anonymity*

# Deceptive Impression Management (DIM) in Employment Interviews

*Please listen to all instructions carefully.*



Please Type This URL Into Your Preferred Search Engine

[https://ucpcommerce.eu.qualtrics.com/jfe/form/SV\\_exNV7sYfmhthq9v](https://ucpcommerce.eu.qualtrics.com/jfe/form/SV_exNV7sYfmhthq9v)

*Please listen to all instructions carefully.*



## Participants' Rights: Informed Consent & Demographics

1. This study has been approved by UCT's **Faculty of Commerce Ethics in Research Committee** and the **Department of Student Affairs**.
2. Your participation in this study is voluntary.
3. All of your responses will be anonymous and confidential.
4. The results from this study will only be used for research purposes at UCT.
5. Please answer all the questions about your demographics. This information will be used for statistical purposes only.
6. If you complete the full study, you are entitled to a **financial research participation incentive of R100 cash**. You will not receive anything if you leave the study early.
7. You are free to leave the study at any point in the research process without experiencing any consequences or repercussions.
8. Your participation in this study does not pose harm to yourself or anyone else.
9. Please voluntarily disclose your email address. This information will not be used to identify you and it will be kept confidential. The researcher will use your email address to notify you when your research participation incentive is ready for collection. If you do not want to disclose your email address, please write an anonymous identity on your letter of informed consent (e.g., "participant\_123"). Please provide your email address/anonymous identify when collecting your research participation incentive at the Department of Organisational Psychology at the end of the semester. For those using an anonymous identity, please collect your research participation incentive on the 17th of October 2018 at the Department of Organisational Psychology from 13:00 - 16:30pm.
10. If you have any questions and/or concerns, please contact me [mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za) or my supervisor [francois.dekok@uct.ac.za](mailto:francois.dekok@uct.ac.za)
11. If you do not want to take part in this study, please leave the venue now.
12. If you choose to participate, please complete click "yes" on the letter of informed consent now.

## Today's Session Outline

1. We will be learning about Deceptive Impression Management (DIM) in employment interviews during a short lecture.
  2. After the lecture, we will complete **two tasks** (i.e., an **example task** and a **practice task**).
  3. During the **example task**, the researcher will identify and explain the DIM narratives and DIM cues used by a job applicant in a video-recorded mock employment interview.
  4. During the **practice task**, you will identify and explain the DIM narratives and DIM cues used by two job applicants in two separate video-recorded mock employment interviews.
- 
1. Having done this, you will share and discuss your ratings with the student(s) sitting next to you.
  2. The researcher will provide you with feedback and correct your ratings.
  3. You will complete a 50 minute assessment on DIM.

## Today's Session Agenda

1. Introduction (15 minutes)
2. Short lecture (20 minutes)
3. Example Task (10 minutes)
4. Practice Task (10 minutes)
5. Group sharing and discussion (5 minutes)
6. Feedback (10 minutes)
1. DIM assessment (50 minutes)

## Short Lecture Outline (20 minutes)





## Impression Management (IM) in Employment Interviews

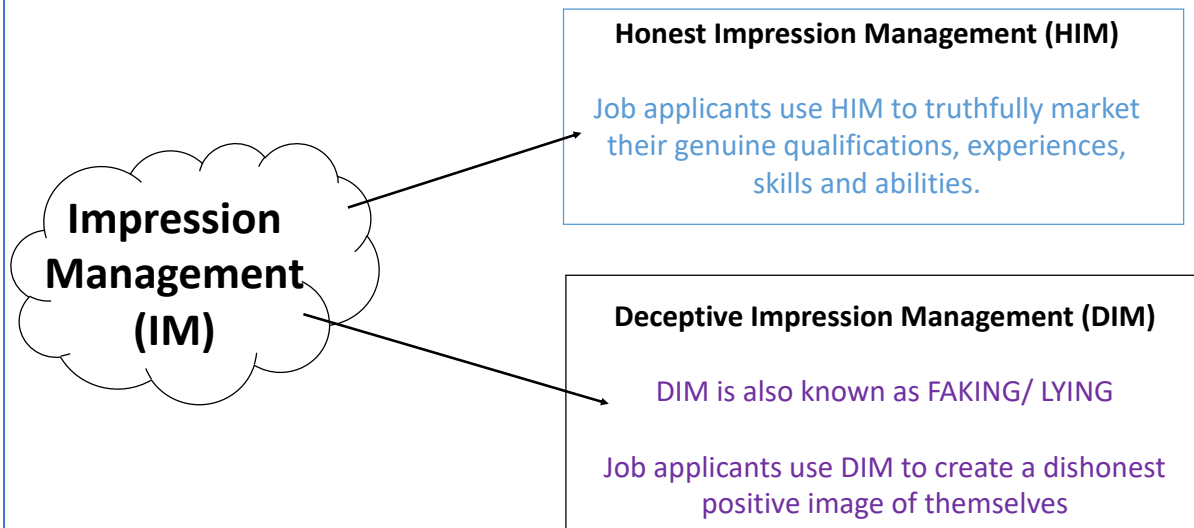
Employment interviews are used to screen job applicant(s); with the aim of selecting the best job applicant

97.5% of job applicants engage in at least one Impression Management (IM) tactic per employment interview

IM tactics positively influence interviewers' perceptions about the applicant's job suitability

IM = influencing the perception of being a good candidate for the job

## Two Categories of Impression Management (IM)



This study focuses on ...

# Deceptive Impression Management (DIM)

... but why?

... DIM is a BIG problem!!!

*DIM is problematic because*

1. **DIM is difficult to detect:** On average, interviewers only detect 20% of job applicants' IM tactics. If IM is correctly detected, there is a 50% chance that interviewers will accurately differentiate between HIM and DIM.
2. **DIM threatens the validity of employment interviews.** DIM causes interviewers to make inaccurate hiring decisions: deceptive applicants are often chosen above better truthful applicants
3. **Inaccurate hiring decisions are costly for organisations because:**
  - Organisations waste time and money recruiting and selecting deceptive individuals
  - Once hired, deceptive employees are often less productive and less profitable than others
  - Once hired, deceptive employees are more likely to engage in undesirable workplace behaviours (e.g., theft)

## Three Types of DIM Tactics

DIM TACTIC	DEFINITION
DECEPTIVE IMAGE CREATION:	To make an image of a good candidate for the job.  To construct/invent/borrow experiences and accomplishments in response to a question.
DECEPTIVE INGRATIATION:	To gain favour with the interviewer to improve the appearance of a good candidate for the job.  To express insincere beliefs and values to conform to those held by the interviewer/organisation.
DECEPTIVE IMAGE PROTECTION:	To defend an image of a good candidate for the job.  To mask or omit negative job-related experiences

During employment interviews, each **Type of DIM tactic** is manifested in specific **DIM cues** and in the job applicant's **narrative**

What are DIM **CUES**?

**DIM cues** are the job applicant's verbal or non-verbal behaviours

What is a **NARRATIVE**?

A job applicant's **narrative** is the story he/she tells the interviewer

## Deceptive Image Creation Cues

<u>Deceptive Image Creation Cues</u>		
<u>CUE LEVEL</u>	<u>CUE CATEGORY</u>	<u>CUE</u>
MICRO CUES	Facial Cues	Not Smiling
	Verbal Cues	Speaking Errors
		Speaking Quickly
		No Silences
MACRO CUES		Less Anxiousness
		Less Professionalism

## Deceptive Image Protection Cues

<u>Deceptive Image Protection Cues</u>		
<u>CUE LEVEL</u>	<u>CUE CATEGORY</u>	<u>CUE</u>
MICRO CUES	Verbal Cues	No Silences
MACRO CUES		-

## Deceptive Ingratiation Cues

<u>Deceptive Ingratiation Cues</u>		
<u>CUE LEVEL</u>	<u>CUE CATEGORY</u>	<u>CUE</u>
MICRO CUES	Facial Cues	Not Smiling
	Verbal Cues	No Silences
MACRO CUES		Attentiveness
		Less Anxiousness

## General Deception Cues

Struggling to remember the specific DIM cues for each DIM tactic?  
 ... if you are struggling,  
 please try to remember the **general deception cues** on the next slide 😊

## General Deception Cues

General Deceptive Impression Management (DIM) Cues		
CUE LEVEL	CUE CATEGORY	CUE
MICRO CUES	Facial Cues	Not Smiling
	<i>Restrained facial Cues</i>	
	Verbal Cues	Speaking Errors
	<i>Unrestrained verbal Cues</i>	Speaking Quickly
MACRO CUES		No Silences
		Attentiveness
		Less Anxiousness
		Less Professionalism
<i>Restrained macro cues (overt behaviours)</i>		Less Movement (e.g., less hand gestures, less head movements)

## Deceptive Narratives

Lets look at the **deceptive narratives** for:

1. Deceptive Image Creation
2. Deceptive Image Protection
3. Deceptive Ingratiation

## Deceptive Image Creation Narratives

To make/invent an image of a good candidate for the job

*During the job applicant's narrative (story), he/she:*

1. **Embellishes** (overstates answers beyond a reasonable description of the truth)
2. **Tailors** (modifies or adapts answers to fit the job)
3. **Fit enhances** (creates the impression of a fit with the job or organisation in terms of beliefs, values, and attitudes)
4. **Constructs** (builds stories by combining or arranging work experiences to provide better answers)
5. **Invents** (cooks up better answers)
6. **Borrows** (answers based on examples of job performance of other employees)

## Deceptive Image Protection Narratives

To defend an image of a good candidate for the job

*During the job applicant's narrative (story), he/she:*

1. **Omits** (does not mention some things in order to improve answers)
2. **Masks** (disguises or conceals aspects of background information to create better answers)
1. **Distances** (improves answers by separating himself/herself from negative events or experiences)

## Deceptive Ingratiation Narratives

To gain favour with the interviewer to improve the appearance of a good candidate for the job

*During the job applicant's narrative (story), he/she:*

1. **Opinion Conforms** (expresses beliefs, values, or attitudes held by the interviewer or organisation)
2. **Interviewer or Organisation Enhances** (insincerely praises or complements the interviewer or organisation)

## Example Task (10 minutes)

*Please listen to all instructions carefully.*





### Example Task (10 minutes)

1. We will watch a video-recorded mock employment interview together. In this case, the “job applicant” is a doctor.
2. When I detect **DIM**, I will pause the interview.
3. I will tell you which **DIM cue** and/or **DIM narrative** I have detected, as well as the **type of DIM tactic**.



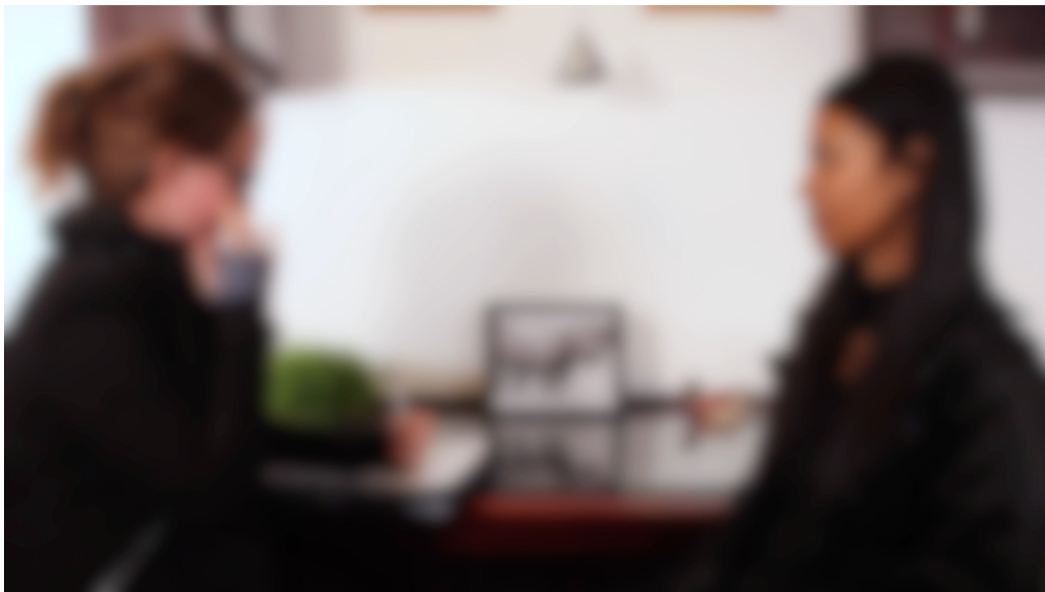
## Practice Task (10 minutes)

*Please listen to all instructions carefully.*



## Practice Task (10 minutes)

1. We will watch two video-recorded mock employment interviews together.  
Interview 1: "Job applicant" = manager  
Interview 2: "Job applicant" = chef
1. I will pause the video at certain points. At some of these points, deception is present. At other times, deception is not present.
1. On the front of worksheet provided, you will be asked whether you detect deception at each point. You will circle the most appropriate response (yes/no/unsure).
2. On the back of the worksheet provided, you will answer 6 short questions pertaining to each interview respectively.
3. Having done this, you will share and discuss your responses with the student(s) sitting next to you.



## Sharing and Discussion (5 minutes)

*Please listen to all instructions carefully.*



## Sharing and Discussion (5 minutes)

Turn to the student(s) sitting next to you. In small groups (2 – 3 students), please discuss the following:

1. At which points did you detect deception in each interview?
2. To what extent do you think each job applicant was honest?
3. To what extent do you think each job applicant was deceptive?
4. To what extent do you think each job applicant engaged in “deceptive image creation”?
5. To what extent do you think each job applicant engaged in “deceptive ingratiation”?
6. To what extent do you think each job applicant engaged in “deceptive image protection”?
7. How realistic do you think each video-recorded mock interview is?

## Feedback (10 minutes)

*Please listen to all instructions carefully.*



## DIM Assessment (50 minutes)

*Please listen to all instructions carefully.*



## Question: DIM 1A & DIM 1B (20 minutes)

*Please listen to all instructions carefully.*



## DIM 1A & DIM 1B Instructions

1. Please insert your earphones.
2. Please watch the following video-recorded mock employment interview containing deception (lying/faking), while adhering to the following steps:
3. When you detect a deceptive example (i.e., a verbal/ non-verbal behaviour indicating lying/faking) , please hit "pause" to pause the video.
4. Write the time at which you detected the deceptive example in the space below. The time MUST be written in the correct format (e.g. 1:34).
5. Press "enter" to start a new paragraph.
6. Hit "play" again to continue playing the video.
7. Continue the above steps until the video is finished.

## DIM Test 2 (20 minutes)

*Please listen to all instructions carefully.*



## DIM Test 2 Instructions

1. Please match each deceptive example (vertical axis) with the correct type of deceptive tactic (horizontal axis). You can use the following DECEPTIVE TACTIC DEFINITIONS to guide you:

DECEPTIVE IMAGE CREATION:	<p>To make an image of a good candidate for the job.</p> <p>To construct/invent/borrow experiences and accomplishments in response to a question.</p>
DECEPTIVE INGRATIATION:	<p>To gain favour with the interviewer to improve the appearance of a good candidate for the job.</p> <p>To express insincere beliefs and values to conform to those held by the interviewer/organisation.</p>
DECEPTIVE IMAGE PROTECTION:	<p>To defend an image of a good candidate for the job.</p> <p>To mask or omit negative job-related experiences</p>

2. Do not request help from the student(s) sitting next to you.
3. If you need help, please raise your hand and the researcher will assist you.

## DIM Test 3 (15 minutes)

*Please listen to all instructions carefully.*



### DIM Test 3 Instructions

1. Please watch the following three video-record mock employment interviews containing deception (lying/ faking).
2. Pay close attention to the job applicant's verbal and non-verbal behaviours. You will use the information you observe to complete the short questionnaire on the next page.
3. After watching the video, please click "next" to continue to the next page.
4. When you finish DIM Test 3, do not leave the venue before the researcher says so.
5. Do not request help from the student(s) sitting next to you.
6. If you need help, please raise your hand and the researcher will assist you.
7. Please insert your earphones and press "play" on your screen now.



## End of Study

*Thank you for your participation.*

If you have any questions and/or concerns, please contact me  
[mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za) or my supervisor [francois.dekock@uct.ac.za](mailto:francois.dekock@uct.ac.za)



## Appendix O

### Voluntary Training Participant's Letter of Informed Consent



Dear Student Participant

UCT's Department of Organisational Psychology requires Masters Students to conduct a research study. This research study investigates Deceptive Impression Management (DIM) in employment interviews.

This study has been approved by the Faculty of Commerce Ethics in Research Committee and the Department of Student Affairs.

As you are aware, deception was used in this study, necessitating debriefing. As part of the debriefing process, voluntary training was offered to the control group participants who did not receive training during the post-test only true experiment. You, as a student participant who was randomly assigned to the control group, have requested to receive training. Please note that your participation in this training is voluntary and you will not receive a financial research participation incentive of your time.

If you voluntarily participate in this additional training, your responses will be kept anonymous and confidential. You are free to leave this training at any time without experiencing any negative consequences or repercussions. Your participation in this training does not pose any harm to yourself or anyone else.

During the training, you will be given a short lecture, and you will be asked to watch several video-recorded mock employment interviews which contain deception (lying/faking), while also rating the deception in each interview. The training is expected to take approximately 45 – 60 minutes to complete.

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*I consent to the above (signature)*

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*Date of training*

If you have any questions or concerns regarding this research study, please do not hesitate to contact the researcher: Megan Martin ([mrtmeg005@myuct.ac.za](mailto:mrtmeg005@myuct.ac.za)) or the research supervisor: Francois De Kock ([francois.dekock@uct.ac.za](mailto:francois.dekock@uct.ac.za)).

## Appendix P

### Deceptive Narrative/ Discourse Examples

Items scoring >.75 on Levashina and Campion's (2007) Exploratory Factor Analysis (EFA).

Item Number	Code	Item	EFA Value
<b>Deceptive Image Creation</b>			
1.	ICEMB4	The candidate exaggerates his/her responsibilities on his/her previous jobs.	.79
2.	ICEMB5	The candidate exaggerates the impact of his/her performance on his/her past jobs.	.84
3.	ICTAI7	The candidate distorts his/her answers based on the interviewer's comments or reactions.	.77
4.	ICTAI8	The candidate distorts his/her answers to emphasise what the interviewer is looking for.	.81
5.	ICTAI9	The candidate distorts his/her answers based on the information he/she obtains during the interview.	.78
6.	ICFIT13	The candidate enhances his/her fit with the job in terms of attitudes, values, or beliefs.	.82
7.	ICFIT14	The candidate inflates the fit between his/her values and goals and the values and goals of the organisation.	.80
8.	ICCON18	The candidate tells fictional stories prepared in advance of the interview to best present his/her credentials.	.82
9.	ICCON19	The candidate fabricates examples to show his/her fit with the organisation.	.77
10.	ICCON20	The candidate makes up stories about his/her work experience that are well developed and logical.	.79
11.	ICCON24	The candidate uses made-up stories for most questions.	.79
12.	ICINV29	The candidate misrepresents the description of an event.	.75
13.	ICINV30	The candidate stretches the truth to give a good answer.	.82
14.	ICBOR34	When he/she does not have a good answer, the candidate borrows work experiences from other people and make them sound like his/her own.	.89
15.	ICBOR35	The candidate uses other people's experiences to create answers when he/she does not have good experiences of his/her own.	.82
<b>Deceptive Protection</b>			
16.	IPOMI38	The candidate tries to avoid discussing job tasks that he/she may not be able to do.	.82
17.	IPOMI39	The candidate tries to avoid discussing his/her lack of skills or experiences.	.75
18.	IPDIS50	The candidate tries to suppress their connection to negative events in his/her work history.	.86
19.	IPDIS51	The candidate clearly separates himself/herself from the past work experiences that would reflect poorly on him/her.	.83
<b>Deceptive Ingratiation</b>			
20.	ICON56	The candidate tries to express the same opinions and attitudes as the interviewer.	.91
21.	ICON57	The candidate tries to appear similar to the interviewer in terms of values, attitudes, or beliefs.	.84
22.	INENH62	The candidate exaggerates the interviewer's qualities to give the impression that he/she thinks highly of the interviewer.	.86
23.	INENH63	The candidate exaggerates his/her positive comments about the organisation.	.77

## Appendix Q

### DIM Test 2 Example Items

	Deceptive Image Creation	Deceptive Ingratiation	Deceptive Image Protection
A. Candidate exaggerates the responsibilities on their previous jobs (candidate appears to show less professionalism).	X		
B. The candidate tries to exaggerate the interviewer's qualities to create the impression that they think highly of the interviewer (candidate is attentive to the interviewer).		X	
C. The candidate distorts their answers based on the information about the job they obtain during the interview (candidate does not appear to be anxious).	X		
D. The candidate tries to avoid discussing job tasks that they may not be able to do (speaking with no silences).			X

## Appendix R

### Formulae for Cronbach's Accuracy Components

Table R1

#### *Formulae for Cronbach's Accuracy Components*

Component	Formula
EL	$E^2 = (OGM - TGM)^2$
DE	$DE^2 = \frac{1}{n} \sum_i [(OM_i - OGM) - (TM_i - TGM)]^2$
SA	$SA^2 = \frac{1}{k} \sum_j [(OM_j - OGM) - (TM_j - TGM)]^2$
DA	$DA^2 = \frac{1}{kn} \sum_i \sum_j [(OM_{ij} - OM_i - OM_j + OGM) - (TM_{ij} - TM_i - TM_j + TGM)]^2$

*Note.* OGM = observed grand mean (mean rating across all targets and all traits); TGM = true grand mean (SME's mean rating across all targets and all traits); OM<sub>i</sub> and TM<sub>j</sub> = mean rating and mean true score for target i; OM<sub>j</sub> and TM<sub>j</sub> = mean rating and mean true score for trait j; OM<sub>ij</sub> and TM<sub>ij</sub> = rating and true score for target i and trait j (Powell, 2007, p. 60).

# Appendix S

## Summary of Hypotheses

Table S1

Summary of Test Results: All Hypotheses Tested using Mann-Whitney U

H*	Mdn		U	z	p	Mean Rank		Sum of Ranks		M	95% Confidence Interval		Cohen's d	Power	Decision
	Control Group	Experimental Group				Control Group	Experimental Group	Control Group	Experimental Group		Lower Bound	Upper Bound			
H <sub>1</sub>	3.40	4.55	527.00	-5.81	.00	36.94	72.09	1958.00	4037.00	4.11	3.93	4.28	1.25	.96	Accept H <sub>1</sub>
H <sub>1a</sub>	5.00	9.00	701.00	-4.75	.00	40.23	68.98	2132.00	3863.00	7.77	7.10	8.44	.91	.95	Accept H <sub>1a</sub>
H <sub>1b</sub>	2.00	4.50	337.00	-7.01	.00	33.36	75.48	1768.00	4227.00	3.33	3.06	3.60	1.74	.97	Accept H <sub>1b</sub>
H <sub>1c</sub>	3.00	4.50	1106.00	-2.30	.02	47.87	61.75	2537.00	3458.00	4.39	3.85	4.91	.42	.95	Accept H <sub>1c</sub>
H <sub>1d</sub>	7.50	5.00	329.00	-7.01	.00	76.79	34.38	4070.00	1925.00	6.16	5.89	6.43	1.80	.96	Accept H <sub>1d</sub>
H <sub>1e</sub>	-1.00	-.25	1113.50	-2.25	.02	48.01	61.62	2544.50	3450.50	-1.11	-1.62	-.60	.32	.95	Accept H <sub>1e</sub>
H <sub>2</sub>	2.05	2.06	1358.50	-.77	.44	52.63	57.24	2789.50	3205.50	2.06	2.04	2.08	.23	.95	Accept H <sub>0</sub> *
H <sub>2a</sub>	1.29	1.36	1442.50	-.26	.80	55.78	54.26	2956.50	3038.50	1.35	1.31	1.39	.10	.95	Accept H <sub>0</sub> *
H <sub>2b</sub>	2.00	2.00	1125.50	-2.85	.00	48.24	61.40	2556.50	3438.50	1.94	1.91	1.97	.55	.95	Accept H <sub>2b</sub>
H <sub>2c</sub>	3.00	3.00	1453.00	-.27	.79	55.58	54.45	2946.00	3049.00	2.89	2.84	2.93	.02	.95	Accept H <sub>0</sub> *
H <sub>5a</sub>	.22	.31	1265.50	-1.33	.18	50.88	58.90	2696.50	3298.50	.09	-.15	.33	.33	.95	Accept H <sub>0</sub> *
H <sub>5b</sub>	.75	.61	1227.50	-1.59	.11	59.84	50.42	3171.50	2823.50	.77	.63	.91	.19	.95	Accept H <sub>0</sub> *
H <sub>5c</sub>	1.67	1.05	1308.50	-1.08	.28	58.31	51.87	3090.50	2904.50	1.62	1.33	1.91	.20	.95	Accept H <sub>0</sub> *
H <sub>6a</sub>	1.66	1.71	1206.50	-1.70	.09	49.76	59.96	2637.50	3357.50	1.76	1.53	1.99	.33	.95	Accept H <sub>0</sub> *
H <sub>6b</sub>	1.70	1.70	1369.00	-.70	.48	52.83	57.05	2800.00	3195.00	1.79	1.55	2.03	.11	.95	Accept H <sub>0</sub> *
H <sub>6c</sub>	1.19	1.14	1370.50	-.70	.49	57.14	52.97	3028.50	2966.50	1.29	.99	1.57	.10	.95	Accept H <sub>0</sub> *

\*Note. H is an abbreviation for Hypothesis.

H<sub>0</sub> is an abbreviation for Null Hypothesis.

Missing values deleted listwise.

Table S2

*Summary of Test Results: Independent Samples t-tests Pertaining to Hypothesis Three*

	Control		Experimental		$t$	$df$	Sig.	95% Confidence		Cohen's	Power	Decision
	Group		Group					Interval		$d$		
	$M$	$SD$	$M$	$SD$				Lower	Upper			
								Bound	Bound			
H <sub>3</sub> Cronbach's DA	.81	.22	.88	.22	-1.80	107	.07	-.16	.01	.35	.95	Accept H <sub>0</sub>
H <sub>3</sub> Borman's Accuracy	.58	.41	.53	.33	.79	107	.43	-.08	.20	.15	.95	Accept H <sub>0</sub>

\*Note. H is an abbreviation for Hypothesis.

H<sub>0</sub> is an abbreviation for Null Hypothesis.

Table S3

*Summary of Test Results for Spearman's Rho Correlation Matrix: Hypothesis 4a, 4b, 4c*

Hypothesis 4a (H <sub>4a</sub> )			
Total Sample N = 109			
	DIM Cue Detection	DIM Cue Utilisation	Overall DIM Profile Rating Accuracy
DIM Cue Detection	-		
DIM Cue Utilisation		-	
ρ	.07		
Sig.	.44		
Overall DIM Profile Rating Accuracy			-
ρ	-.04	.18	
Sig.	.70	.06	
Hypothesis 4b (H <sub>4b</sub> )			
Control Group n = 53			
	DIM Cue Detection	DIM Cue Utilisation	Overall DIM Profile Rating Accuracy
DIM Cue Detection	-		
DIM Cue Utilisation		-	
ρ	.15		
Sig.	.28		
Overall DIM Profile Rating Accuracy			-
ρ	-.07	.23	
Sig.	.64	.11	
Hypothesis 4c (H <sub>4c</sub> )			
Experimental Group n = 56			
	DIM Cue Detection	DIM Cue Utilisation	Overall DIM Profile Rating Accuracy
DIM Cue Detection	-		
DIM Cue Utilisation		-	
ρ	.01		
Sig.	.92		
Overall DIM Profile Rating Accuracy			-
ρ	.07	.17	
Sig.	.61	.20	

Note. \*p < .05.

Missing values deleted pairwise.



Table S4

*Summary: Effect Sizes and Statistical Power for Test Results of All Hypotheses*

Hypothesis	Cohen's <i>d</i>	Power
H1	1.25	.96
H1a	.91	.95
H1b	1.74	.97
H1c	.42	.95
H1d	1.80	.96
H1e	.32	.95
H2	.23	.95
H2a	.10	.95
H2b	.55	.95
H2c	.02	.95
H3 Cronbach's DA	.35	.95
H3 Borman's DA	.15	.95
H5a	.33	.95
H5b	.19	.95
H5c	.20	.95
H6a	.33	.95
H6b	.11	.95
H6c	.10	.95
Elevation (EL)	.46	.95
Differential Accuracy (DA)	.36	.95
Differential Elevation (DE)	.10	.95
Stereotype Accuracy (SA)	.48	.95

*\*Note. H is an abbreviation for Hypothesis.*